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Proceedings Journal of Interdisciplinary Research is a peer-reviewed interdisciplinary journal covering all aspects of social, scientific, behavioral, and other interrelated subject of research presented in the Interdisciplinary Research Regional Conference organized by the International Research Enthusiast Society Inc. (IRES) The journal publishes articles, research reports, conference and book reviews on education, technology, sociology, humanities, history, politics, economics, geography, cultural studies, anthropology, environmental studies and others. It provides an avenue for academic and non-academic researchers representing a wide variety of disciplines from the region to disseminate findings and discuss topics of relevance to human activities. The editors aim to foster a scholarly discussion among people with the most varied backgrounds and points of view. In order to include your paper in this journal, submissions must be through the IRRC or IRES. The journal aimed to publish articles or significant research report in English and Filipino per volume. All articles in Filipino will be peer-reviewed and edited to the highest standards, as are all the articles published in the journal.

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**1<sup>st</sup> Interdisciplinary Research Regional Conference (IRRC)**  
**International Research Enthusiast Society Inc. (IRES Inc.)**  
**November 21-22, 2014**

## **The Image Of Modern Filipino Pirates: Dimensions And Implications Of Media Piracy**

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### **Abstract**

Media piracy is slowly increasing its popularity, in the Internet, in the market, schools and the community. Day by day, millions of information is either being downloaded or uploaded to or from the Internet and making media piracy a lot more popular than it is already. Enjoying the comfort of their beds and by just clicking, pirates have already earned thousands in just a minute, which attracts people to join the pack. There is no doubt that media piracy could take over the world, because in just over three decades it became a global matter. It became a monster of the society. This study is all about The Image of Modern Filipino Pirates: Dimensions and Implications on Media Piracy. This study was conducted in Lorma Colleges Special Science High School and its respondents were 3rd year and 4th year students and the Faculty of LCSSHS. This study focused on the following theories such as Rational Choice Theory, Social Learning Theory and Self-Control Theory.

**Keywords:** media piracy, pirates, global matter, rational choice, social learning, self-control

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## Introduction

Taking over the world has never been easier, but multimedia piracy made it possible. In simpler terms, media piracy has flourished. Beneficial, yet it can destroy. What exactly is media piracy? Media piracy is the illegal copying, distribution, or use of media according to *thefreedictionary.com*. It is such a profitable "business" that it has caught the attention of organized crime groups in a number of countries. Media piracy makes it convenient, cheap, fast, and affordable to obtain various files and information, especially for the students and teachers, the innocent pirates.

Having been called as the 21<sup>st</sup> century pirates, they continue to create ways to retrieve information faster without any hassle, making things easier for them and a lot harder for media industries. It became a monster of the society and a cancer without any way to stop spreading.

And because of these, the researchers came up with the study entitled *The Image of Modern Filipino Pirates: Dimensions and Implications on Media Piracy*.

## Statement of the Problem

1. What is the level of awareness of the community about the rules in piracy?
2. How does Media Piracy affect the following respondents?
  - 2.1 3<sup>rd</sup> year and 4<sup>th</sup> year students of Lorma Colleges Special Science High School
  - 2.2 Faculty of Lorma Colleges Special Science High School
3. What will be the effects of Media Piracy?

## Methodology

### *Research Design*

The researchers were tasked to focus on a descriptive research design. According to Oklahoma State University, Descriptive research is used to obtain information concerning the current status of the phenomena to describe, "what exists" with respect to variables or conditions in a situation. The methods involved range from the survey, which describes the status quo, the correlation study that investigates the relationship between variables, to developmental studies, which seek to determine changes over time.

Writer Kendra Cherry defines survey as a data collection tool used to gather information about individuals. A survey may focus on factual information about individuals, or it might aim to collect the opinions of the survey takers. A survey can be administered in a couple of different ways. In one method known as a structured interview, the researcher asks each participant the questions. In the other method known as a questionnaire, the participant fills out the survey on his or her own. To ensure reliability and validity, surveys are standardized. This research uses questionnaire.

### *Subject of the Study*

The study was conducted on Lorma Colleges Special Science High-School, school year 2013-2014.

Lorma Colleges Special Science High School is the only educational institution in Regions 1, 2 and CAR that is Level III Accredited by the ACSCU-AAI (Association of Christian Schools, Colleges and Universities Accrediting Association Inc.). Level III is the highest accreditation given to Basic Education schools in the Philippines.

### *Population/Respondents*

Third year and fourth year male and female students, within the ages of 14-17 years old, as well as high-school faculty members, within the ages of 20-50, were selected non-randomly.

### *Data-Gathering Procedure*

A fixed set of questionnaires was floated to 3<sup>rd</sup> year and 4<sup>th</sup> year students as well as the high-school faculty of Lorma Colleges Special Science High-School. The questionnaires were based on three main theories namely: Self-Control Theory, Rational Choice Theory, and Social Learning Theory.



### Methods

The researchers utilized questionnaires to the respondents and tallied the results. Once they were tallied, they were presented in a tabular form and the tables were interpreted. The table includes the frequency, mean, rankings and numerical values.

### Statistical Tools

The researchers identified the frequency, mean, rankings and numerical values to provide substantial evidence for the said study.

The frequency aims to determine the constancy of the respondents' preferred choice, in different perspective regarding the self-control theory, rational choice theory and the social learning theory. The mean aims to identify the general response of the respondents. The rankings aim to determine what they perceive as the most important choice for them, given limited choices, while the numerical values aim to solve for the mean and frequency.

Table 1. Presents the response of the teachers regarding the people that have affected a person to pirate materials from the Internet

Person	Frequency	%	Rank
Friends	11	50	1
Family	3	13.64	3
Classmates	4	18.18	2
Teacher	2	9.09	4
None	1	4.55	5
Others	1	4.55	5
<b>Total</b>	<b>22</b>	<b>100</b>	

Table 2. Presents the response of the students regarding the people that have affected a person to pirate materials from the Internet

Person	Frequency	%	Rank
Friends	84	37	1
Family	35	15.42	3
Classmates	74	32.6	2
Teacher	14	6.17	5
None	15	6.61	4
Others	5	2.2	6
<b>Total</b>	<b>227</b>	<b>100</b>	

Tables 1 and 2 shows that friends are the main people that influence people to pirate materials from the Internet. Social Learning theory shows that people get influenced easily by the people they spend most of their time with (which would be their friends). According to the theory, Higgins and Makin (2004) provide evidence that association with pro piracy peers facilitates piracy through social learning.

Table 3. Presents the response of the teachers on how people acquire pirated materials

Ways of Pirating through the following:	Frequency	%	Rank
Internet sites	15	50	1
Shared by peers	8	26.67	2
Stores selling pirated medias	7	23.33	3
Others	0	0	4
<b>Total</b>	<b>30</b>	<b>100</b>	



Table 4. Presents the response of the students on how people acquire pirated materials

Ways of Pirating through the following:	Frequency	%	Rank
Internet sites	117	65.36	1
Shared by peers	21	11.73	3
Stores selling pirated medias	38	21.23	2
Others	3	1.68	4
<b>Total</b>	<b>179</b>	<b>100</b>	

Tables 3 and 4 shows that Internet sites are the main sources of pirated materials. People download on the Internet because lots of things on the Internet are free, and access to those materials is easy. There are also a lot of websites that offer free downloads like the piratebay.org and torrentz.eu. An info graph by go-gulf.com states that 146 million people visit pirate websites every day and 53 billion visits every year. (<http://www.go-gulf.com/blog/online-piracy/>)

Table 5 Theoretical foundations of piracy

Theories	4		3		2		1			
SCT	f	%	f	%	f	%	f	%	Mean	Value
Q1	9	6.87	25	19.08	62	47.33	35	26.72	2.06	Maybe
Q2	17	13.18	32	2.48	45	34.88	35	27.13	2.24	Maybe
Q3	20	15.50	38	29.46	43	33.33	28	21.70	2.39	Maybe
Q4	9	6.98	28	21.71	55	42.64	37	28.68	2.07	Maybe
Q5	20	15.38	35	26.92	48	36.92	27	20.77	2.37	Maybe
General Average:									2.23	
RCT	f	%	f	%	f	%	f	%	Mean	Value
Q6	14	10.69	30	22.90	57	43.57	30	22.90	2.22	Maybe
Q7	23	17.56	41	31.30	48	36.64	19	14.50	2.56	Definitely
Q8	14	10.94	31	24.22	51	39.84	32	25	2.21	Maybe
Q9	25	19.69	37	29.13	47	37.01	18	14.17	2.54	Definitely
Q10	13	10	22	16.92	42	32.31	53	40.77	1.96	Maybe
General Average:									2.30	
SLT	f	%	f	%	f	%	f	%	Mean	Value
Q11	13	9.77	23	17.29	51	38.35	46	34.59	2.02	Maybe
Q12	17	14.05	27	22.31	45	37.19	32	26.45	2.24	Maybe
Q13	19	14.50	34	25.95	39	29.77	39	29.77	2.25	Maybe
Q14	13	10	20	15.38	50	38.46	47	36.15	1.99	Maybe
Q15	15	11.54	23	17.69	45	34.62	47	36.15	2.05	Maybe
General Average:									2.11	

Table 6 shows that the Rational Choice Theory is the main factor, which leads to people pirating materials. People acquire pirated materials because they believe that these acts will be their benefits. The emphasis on the individual and his or her interests is always a starting point for any theory of rational choice. Abell notes that "it is only individuals who *ultimately* take actions and social actions, individual actions and social actions are optimally chosen" and "individuals' actions and social actions are entirely concerned with their own welfare "The actor's preferences (related to his/her own interests, tastes, and values), and the restrictions to choice are the basic explanatory variables of rational action.



## Conclusion

We cannot deny the fact that Piracy is eventually gaining its popularity in the Philippines. The results gathered from the response of the students and teachers of Lorma Colleges Special Science High School shows significant dimensions of media piracy. Its different dimensions are classified according to the views of respondents regarding the way they practice media piracy. External factors regarding piracy include the different characters from the society, school and at home. Basing it from the dimensions, the researchers identified different implications of media piracy that are established from the sociological foundations of media piracy.

## Recommendations

The researchers provide sustainable activities in promoting responsible means of acquiring software/data from the Internet. The researchers came up with five different activities to be implemented. Firstly is the Seminar regarding media piracy, with the objective of introducing new ways to acquire software and emphasizing on the dangers of media piracy by presenting the results of the study. The seminar will include the researchers, the respondents, students and teachers, which will be done in one or two days.

The second activity is the Online Forum. In this activity, petitions will be made regarding the websites producing illegal copies of software, for them to be banned. This will include the researchers and online forum users, which will take place for as long as the petitions are yet to be noticed.

The third activity is a Seminar specifically for distributors of pirated materials, which will help them, realizes the danger of the media piracy business and to help them look for a more beneficial job by talking them out about it. The researchers and the vendors will be present in this seminar, which will take place for 1 to 2 days.

The fourth activity is to create fan pages on social media to promote anti-piracy. This activity will include the researchers, administrators and the social media users. To carry out this activity, the researchers will need to create a page on various websites and to import administrators who will run the pages and advocate anti-piracy throughout the cyber world. The last activity is to float flyers and/or brochures to teach people the importance of referencing and how plagiarism will affect them. This will involve the researchers, students, teachers and the bystanders. .

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## **The Use Of Manipulative In Teaching Basic Mathematics**

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### **Abstract**

Manipulative are concrete objects that are designed to help students learn mathematics. Modeling real life situations and abstract mathematics concepts is the most striking advantage of physical manipulative in the mathematics classroom.

The study used a quasi-experimental design to compare the performance of two freshman Bachelor of Secondary Education classes in Math 101 (Basic Mathematics) and determine the effect of teaching the subject using manipulative. The controlled group had the conventional instruction method while the experimental group was taught using activities with manipulative. Sources of data used in the study were results of the OLSAT mental ability test, an attitude towards mathematics inventory and a mathematics test used in the pretest and posttest. Statistical tools included frequency counts, percentages, ranking, weighted means and t-test for independent samples and correlated samples.

The study found out that both groups were within the normal range of mental ability. The subject had favorable attitude towards mathematics. There was a significant difference in the performance of the two groups after the treatment.

The study recommended the extensive use of manipulative in teaching mathematics classes inasmuch as the students taught could adopt the same techniques when they become teachers in the field.

Key words: manipulative, teaching, Basic Mathematics

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## Introduction

A mathematics teacher needs to employ techniques and aids which will demystify the misconception that mathematics cannot be represented in the real world. One such technique is the use of manipulative, which are concrete objects that are designed to help students learn mathematics. The idea that young students learn best through interacting with concrete objects has sparked much interest in the use of mathematics manipulative. Whether termed manipulative, concrete materials, concrete objects, physical materials are widely touted as crucial to the improvement of mathematics learning (Ball, 2001). Modeling real life situations and abstract mathematics concepts is the most striking advantage of physical manipulative in the mathematics classroom. Concrete materials also promote reasoning and judgment and provide pupils with opportunity to work out by themselves (Ernesto, 2006). Uttal (2005) claimed that mathematics is better learned, and therefore should be taught, by students experiencing it through manipulative. They can provide a cure for student anxiety in mathematics (Garcia, 2002) and can be used in developing pupils'/students' ability to follow directions, comprehend problems and think mathematically (Fortin, 2004).

## Statement Of Objectives/Problems

The study aimed to:

1. Determine the profile of the BSEd freshman students taking Basic Mathematics 1 in terms of mental ability and attitudes towards mathematics
2. Describe the performance of the respondents in the pretest and posttest in both control and experimental groups
3. Find out the significant difference of the performance in the pretest and posttest of the respondents in both the control and experimental groups

## Methodology

The study employed the quasi-experimental design. The subjects were intact classes of the freshman Bachelor of Secondary Education students taking Math 101 (Basic Mathematics). The classes were divided in two groups – a control group taught using the conventional method and the experimental group taught using manipulative. Forty-seven (47) students composed the control group while forty-six (46) students composed the experimental group. The mental ability of the subjects, taken from the result of the Otis-Lennon School Ability (OLSAT) results, was considered to determine the comparability of the two groups. Both groups accomplished a questionnaire on attitudes towards mathematics (Callahan, 2004). The pretest/posttest was a 25-item test covering the nine (9) lessons during the experimental period. The nine lessons focused on perimeters, areas, circumference and volumes. The performance in the pretest/posttest was based in the raw scores categorized into Excellent (24-25), Very Good (21-23), Good (15-20), Fair (12-14), Poor (1-11). The data gathered were treated statistically using frequency counts, percentages, means, t-test for independent samples and t-test for correlated samples.

## Results And Discussion

### *Mental Ability*

The data in table 1 indicate that majority of the subjects in both control and experimental groups had mental abilities within the normal range. This indicates that the two groups are comparable. The similarity in the groups can be traced to the same admission requirements on grades required for freshman students of the College of Education

Table1. Mental Ability of the Subjects

Mental Ability	Control		Experimental	
	f	%	F	%
Superior	0	0.00	1	2.17
Normal	27	57.45	25	54.35
Dull Normal	20	42.55	20	43.48
Total	47	100.00	46	100.00

### *Attitudes towards Mathematics*

Table 2 presents the subjects' attitude towards mathematics. The grand mean of 3.66 indicates that the subjects have a much favorable attitude towards mathematics. This shows that students, unlike common notion of the opposite, have developed a positive disposition towards mathematics. The data shows that the respondents had a very much favorable attitude towards mathematics as it "is as important as other subjects" and it "develops the



ability to think logically and reason out correctly.” This is a manifestation that students recognize the vital role of mathematics at par with other fields and how it is used in critical thinking. The finding of the favorable attitude of students towards mathematics is consistent with Ballado (2003). Last in the rank of indicators is that “mathematics is the easiest of all subjects” with a mean of 2.8. This indicates that although the students know the importance of math, mathematics remains a difficult subject for some.

Table 2. Attitudes towards Mathematics of the Subjects

Indicator	Mean	Interpretation
Math is as important as other subjects.	4.4	Very Much Favorable
Mathematics develops my ability to think logically and reason out correctly.	4.2	Very Much Favorable
I can see much importance in mathematics.	3.9	Much Favorable
I think math is fun and I always want to do it.	3.8	Much Favorable
Mathematics is a stimulating subject.	3.8	Much Favorable
I like math because it is practical.	3.8	Much Favorable
I enjoy the challenge presented by a math problem.	3.8	Much Favorable
I feel sure of myself in mathematics.	3.6	Much Favorable
I enjoy seeing how rapidly and accurately I can work on mathematics problems.	3.6	Much Favorable
I would like to spend more time in school working on mathematics.	3.6	Much Favorable
I am enthusiastic about math and I have liking for it.	3.5	Much Favorable
Math thrills me and I like it better than any subject.	3.5	Much Favorable
I never get tired working with things related to mathematics.	3.3	Favorable
I think mathematics is the most enjoyable subject I have taken.	3.3	Favorable
Math is the easiest of all subjects.	2.8	Favorable

#### *Performance of the Groups in the Pretest*

Table 3 shows the performance of both the control and experimental groups in the pretest. Data shows that there was more subjects in both groups who had scores within the range 10-14 classified as satisfactory performance. This indicates that the scores of the subjects in the pretest were on the average only.

Table 3. Pretest performance of the control and experimental groups

Performance	Control group		Experimental group	
	f	%	F	%
Excellent	0	0.00	2	4.35
Very Satisfactory	4	8.51	8	17.39
Satisfactory	26	55.35	18	39.13
Fair	16	34.04	17	36.96
Poor	1	2.13	1	2.17
Total	47	100.00	46	100.00

#### *Performance of the Groups in the Posttest*

Table 4 shows the performance of both the control and experimental groups in the posttest. Data shows that a big number of subjects in the experimental group which got Very Satisfactory to Excellent performance while majority of the subjects in the control group still had a Satisfactory performance. This indicates that the experimental had a better performance than the control group.

Table 4. Pretest performance of the control and experimental groups

Performance	Control group		Experimental group	
	f	%	F	%
Excellent	2	4.26	22	47.83
Very Satisfactory	11	23.40	20	43.47
Satisfactory	28	59.57	4	8.70
Fair	5	10.64	0	0.00
Poor	1	2.13	0	0.00
Total	47	100.00	46	100.00

#### *Difference in the Performance in the Pretest and Posttest of the Control and Experimental Groups*



Table 5a shows the performance in the pretest and posttest of the control group. The group had a pretest mean of 10.36 and posttest mean of 13.19 with a mean difference of 2.83. At 0.05 level of significance and 46 degrees of freedom, the computed value of 7.556 was beyond the tabular value of 1.679. The null hypothesis of no significant difference between the pretest and posttest performance of the control group was rejected. There is a significant difference in the pretest and posttest performance of the control group. This indicates that there was an improvement in the performance of the control group after the study.

Table 5a. Test of Difference between the Pretest and Posttest of the Control Group						
Test	n	Means	Mean difference	df= 46		Interpretation
				Computed	Tabular	
Pretest	47	10.36	2.83	7.556	1.679	Significant
Posttest		13.19				

Table 5b shows the performance in the pretest and posttest of the experimental group. The group had a pretest mean of 10.67 and posttest mean of 19.04 with a mean difference of 8.37. At 0.05 level of significance and 45 degrees of freedom, the computed value of 15.669 was beyond the tabular value of 1.679. The null hypothesis of no significant difference between the pretest and posttest performance of the experimental group was rejected. There is a significant difference in the pretest and posttest performance of the experimental group. This indicates that there was also an improvement in the performance of the experimental group after the study.

Table 5b. Test of Difference between the Pretest and Posttest of the Experimental Group						
Test	N	Means	Mean difference	df= 45		Interpretation
				Computed	Tabular	
Pretest	46	10.67	8.37	15.669	1.679	Significant
Posttest		19.04				

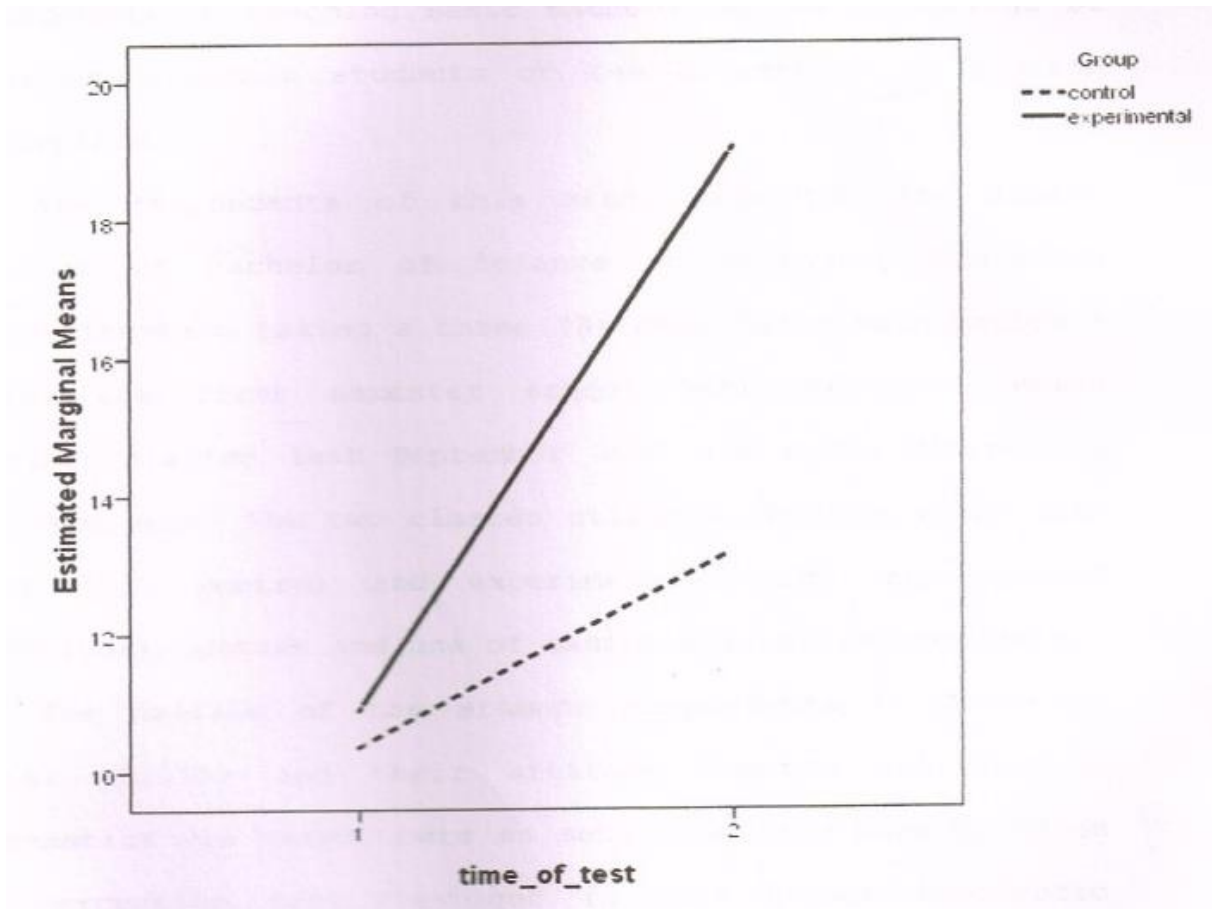
Table 5c shows the summary table of the test of difference of the posttest means of the two groups. Using t-test for independent samples, the computed t-value of 8.158 was higher than the tabular value of 1.962 at 0.05 level of significance with 91 degrees of freedom. The null hypothesis of no significant difference between the posttest performances of the two groups was rejected. There is a significant difference in the posttest performance of the control and the experimental group. This indicates that there was a difference in the performance of the two groups. This also suggests that the use of manipulative contributed in the enhancement of the learning of the experimental group. This finding conforms to the studies of Garcia (2002), Catampo (2000), Buzon (2005), and Ernesto (2006).

Table 5c. Test of Difference between the Posttests of the Control and the Experimental Group						
Test	N	Means	Mean difference	df = 91		Interpretation
				Computed	Tabular	
Control	47	13.19	5.85	8.158	1.962	Significant
Experimental	46	19.04				

Figure 1 shows the interaction plot illustrating how the experimental group differed from the control group in the pretest and posttest scores. The plot clearly showed the insignificant difference of test scores in the pretest between the two groups of respondents. It also provided visual evidence on the significant increase in test scores of experimental groups in comparison with the test scores of control group in the posttest. It could be implied further that the use of manipulative in teaching Basic Mathematics significantly increased the absorption of knowledge of the learners.



Figure 1. Interaction Plot of the Comparison of Pretest and Posttest of the Control and Experimental Groups



## Conclusions

The freshman students have abilities in normal range and with good dispositions towards mathematics. The use of manipulative contributed to the improvement of the performance of the experimental group. There is a need for teachers to explore the use of manipulative as a technique in concretizing abstract ideas in mathematics.

## Recommendations

The study advanced the following recommendations:

1. Teachers should consider the extensive use of manipulative in teaching mathematics classes inasmuch as the students taught could adopt the same techniques when they become teachers in the field.
2. A follow-up research to test the effectiveness of manipulative, highlighting on the different types of manipulative, is recommended. Another study combining manipulative with other instructional materials is recommended to test their effectiveness as alternative classroom strategies.

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## **Understanding Of Accounting Students About Earning Management To Preparation Of Financial Statements, And Code Of Ethics Accountant (Case study at the Widyatama University)**

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### **Abstract**

OECD based on one component of Corporate Governance is the existence of adequate financial reporting system. Wyatt (2004) mentions that there are weaknesses in accounting, is the greed of individuals and corporations, providing services that reduce independence, too 'soft' on the client and avoiding participation in existing accounting rules. Should give greater attention in accounting education on two things, namely the appreciation of the accounting profession and an appreciation of the ethical dilemmas.

This can be manifested in a subject, teaching method to the preparation of the curriculum which is based on the values of ethics and morals. The development of accounting education based on ethics is needed feedback about the current conditions.

This study aimed to determine students' perceptions with intent to know the understanding of earnings management in the preparation of the financial statements and the effectiveness of the existing curriculum in shaping students' understanding of accounting.

The study sample consisted of 139 students majoring in Accounting S1 Regular programs are divided into 100 final year students and 39 new students. It also conducted tests of differences with other accounting courses, the number of samples used in this study were 156 students in Accounting Diploma program, and 62 students of the Accounting Profession.

Based on the research results, (1) that the disclosures of information to the problem avoid differences between groups of respondents. (2) The student refuses accounting earnings management. (3) The difference in the curriculum between studies in accounting education programs lead to differences in perception between students across the course. (4) The process of teaching in S1 has managed to give a better understanding to the students that accountants require interaction with the environment.

**Keywords:** earnings management, code of ethics accountants, independency and financial statements

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## **Background Research**

Based on OECD, one component of corporate Governance is the existence of adequate financial reporting system. One of the factors that still need to be improved on the quality of financial reporting in Indonesia is related to ethics and positive attitude accountant Indonesia.

Wyatt (2004) mentions that there are weaknesses in accounting, is the greed of individuals and corporations, providing services that reduce independence, too 'weak' to the client and avoiding participation in existing accounting rules. Wyatt added to avoid this; the accountant educators should give greater attention in accounting education.

There are two things, namely (1) an appreciation of the accounting profession and (2) an appreciation of the ethical dilemmas. This can be manifested in a subject, teaching method to the preparation of the curriculum which is based on the values of ethics and morals.

In the development of accounting education based on ethics is needed feedback about the current state, i.e. whether the accounting education in Indonesia has enough shape positive values of accounting students. This study aimed to determine students 'perceptions with intent to know the understanding of earnings management in the preparation of the financial statements and the effectiveness of the existing curriculum in shaping students' understanding of accounting.

In the Indonesian Accountants Code states that the purpose of the accounting profession is fulfilling its responsibilities with the highest professional standards, achieving the highest level of performance, with an orientation to the public interest. Further mentioned that one of the four basic needs that must be met is a professional accountant. The seventh principle of Indonesian Accountants Code states that the principle of professionalism means that each member should behave consistent with the good reputation of the profession and avoid actions that may discredit the profession.

Therefore, one of the important things that need to be emphasized in accounting education is how to shape the values and positive perception of students towards the profession.

This research was conducted at the Widyatama University reason with a commitment to build quality float and implemented Quality Management System / QMS ISO 9001: 2000 and certified by TUV Germany, in addition to accreditation of BAN-PT. Implementation of QMS ISO 9001: 2000 meant that the Widyatama University make improvements on an ongoing basis and seeks to produce graduates in particular competence courses S1 Accounting obtained accreditation in order to meet customer requirements, applicable legal requirements, as well as to give satisfaction to the student and the student actors through the service system efficient, effective and sustainable improvement in all processes related units.

To determine this, the researchers conducted a study with the title: "Understanding Accounting Students on the Earnings Management of Financial Statements and Accounting Code of Conduct".

## **Identify the Problem**

1. Is there a difference in the understanding of the perception of earnings management among students S1, PPA and DIII accounting
2. Are there differences in the understanding of misstatements in the financial statements of the company between S1, PPA and DIII accounting
3. Are there differences in understanding regarding the disclosure of sensitive information within the company between S1, PPA and DIII accounting
4. Is there a difference in the understanding of the responsibilities of the users of financial statements between students S1, PPA and DIII accounting
5. Are there differences in the preparation of financial statements involves understanding between students S1, PPA and DIII accounting





## Framework

Earnings Management, as defined by Scott (2003) that earnings management is the choice of accounting policies by managers to achieve certain goals. Various studies have been conducted regarding the purpose of the company's managers, for example, the study by Healy and Wahlen (1999) which states that the purpose for Profit Management is to hide the true condition of the company from shareholders or to affect the agreement or contract made based on financial statement information. In addition, conflicts can also arise from the disclosure of information in the financial statements. Users of financial statements expect to obtain all the information they need from the financial statements, while the information is not necessarily available. The company must pay the costs required to collect and provide the information in the financial statements so that sometimes the amount of information disclosed was limited companies.

Gaa and Thorne (2004) says that accounting education has been focused on the dimensions of policy choices but do not pay attention to the value and credibility which affect the choice. Then Gaa and Thorne mentions that an accountant basically choosing actions based on values that exist in their minds. This opinion is reinforced by Kiger (2004) which states that the accounting education in the classroom should not be focused on ethics in academic subjects but on it's own ethical sensitivity. That's why the formation of moral values and ethics in the mindset of an accountant is very important, and this can be achieved through the socialization of moral values and ethics in accounting education adequately.

Various studies have been conducted abroad regarding behavior (behavior) differences in the behavior of accounting students and their perceptions about the ethics of the accounting profession. Jeffrey (1993) using the Defining Issues Test (DIT) to measure moral education of students. Jeffrey (1993) concluded that senior students had an average higher DIT (has a better moral) than junior students. Clikeman and Henning (2000) conducted research on the socialization of professional ethics regarding earnings management on accounting students at a university in the United States and concluded that the student is not approved accounting earnings management in the later years of their course compared to the early years. Research on the same thing is done in the UK by Marriott and Marriott (2003). They concluded that accounting students have a positive attitude regarding the accounting profession in the early years of college, and declined significantly in the years of the end of the lecture.

## Library studies

### *Significance Analysis of Financial Statements*

The significance of financial statement analysis is as follows:

1. For management: to evaluate the performance of the company, compensation, Career development
2. For shareholders: to investigate the performance of the company, income, investment security.
3. For creditors: to determine the ability of the company to pay off the debt with interest.
4. For the government: taxes, approval to go public.
5. For employees: adequate income, quality of life, job security

## Business Ethics Quality

Copeland, Jr. 2005; Bertens, 2000 Implementation of business ethically determine the quality of the company's business ethics. In general, ethics is defined as the values of behavior or rules of behavior that is accepted and used by a particular group or individual (De George, 1999). According Bertens (2000) and Keraf (1998: 20) that in order to understand ethics should be distinguished with morality. Morality is a system of values about how one should live as a human being.

Ethics of the accounting profession in Indonesia is regulated in the Code of Indonesian Accountants. Code is binding on the members of the IAI on the one hand and can be used by other accountants who are not or have not been a member on the other side. Code new Indonesian Accountants consists of three parts (VIII Congress Proceedings, 1998), namely:

1. Commercial Code. Consists of 8 principles of professional ethics, which is the foundation of professional ethical behavior, provide the basic framework for the Rules of Ethics, and manage the implementation of the provision of



professional services by members, which include: Responsibility Profession, Public Interest, Integrity, Objectivity, Competence and Prudential of Professional, Confidentiality, Professional Conduct and Technical Standards.

2. Of the Code of Accountants Compartment. Accounting Code passed by the Members Meeting Compartment and tie straight as members concerned.

3. Interpretation of the Code of Accountants Compartment. Interpretation of the Code of Accountants Compartment is a guide application of the Code Accountants Compartment.

4. Statement of Professional Ethics that applies when it can be used as an interpretation and or Rules Ethics Rules and Interpretations issued until a new place to replace it.

Indonesian Accountants Code Article 1, paragraph 2, which reads:

"Each member must always maintain the integrity and objectivity in performing their duties. By maintaining the integrity, he will act honestly, decisively and without pretension. By maintaining objectivity, it would be fair without being influenced by pressure / demand vested / personal interest".

### **Object Research**

Respondents were used in this study were students Regular S1 Accounting with Simple Random Sampling method (SRS) is obtained 139 students majoring in Accounting S1 Regular divided into 100 final year students and 39 new students. It also conducted tests of differences with other accounting courses, the number of samples used in this study were 156 students in Accounting Diploma program, and 62 students in the Professional Program in Accounting Widayatama University in 2010.

### **Research Methods**

This research is behavioral (behavior and perception) hence the data that will be used is primary data through questionnaires. The study is descriptive because it only wants to illustrate a different phenomenon accounting students' perceptions of the accounting profession and understanding financial statements.

### **Data Analysis Techniques**

The questionnaire used was a model Clikeman and Henning (2000). Henning Clikeman questionnaire and divided into two parts. (1) Of the questionnaire Clikeman and Henning contains brief case studies of earnings management. (2) The questionnaire contains 11 questions that measure students' perceptions of accounting on financial reporting are reasonable. 11 questions can be grouped into four (4) categories, namely: (1) Mistate, (2) Disclosure, (3) Cost-Benefit and (4) Responsibility. For financial reporting ethical research using Likert Scale with a scale of 1 to 7 this study aimed to see differences between groups of respondents. Nominal data therefore non-parametric testing using the Mann Whitney U-Test. Tests were also done to test the validity and reliability of the questionnaire by using Cronbach alpha.

As for knowing the differences in perceptions of the accounting profession used Accounting Attitude Scale (Nelson, 1991) is divided into 15 Likert Scale questions for use with a scale of 1 to 6 Score 6 strongly agree to the statement and a score of 1 for strongly disagree statements. In interpreting the questionnaire, statement numbers 2, 3, 7, 9, 11, 13 measured in reverse means a positive perception indicated by the response by the respondents disagreed. After doing a reversal on the numbers above, all of the statements given values as follows: 1 = 0, 2 = 2, 3 = 4, 4 = 6, 5 = 8, 6 = 10 So the scale used is no longer 1 to 6 but the scale of 1 to 10 the higher the score the respondent, the better perception.

Nelson grouped into this statement-15 into four major groups, namely:

1. Perceptions of students towards a career as an accountant (statement numbers 9, 10 and 11),
2. Perceptions of students towards accounting as a field of science (statement numbers 2, 5, 7, 14),
3. Perceptions of students towards a professional accountant (statement numbers 1, 4, 6, 8, 12) And,
4. Perceptions of students towards accounting as a group activity (statement numbers 3, 13, 15).

### **Results and Discussion**

#### *Part I: Case Management Earnings*

Issues raised in this study is the choice of a company on a case of earnings management. Scale used to measure the perceptions of the respondents is a Likert scale 1-7, where 1 mean strongly disagree and 7 strongly agree. This means that the greater the score respondents more she approves of earnings management.



Table 1. Average response over the inter-Profit Management Case Study Program

S1 Accounting	DIII Accounting	Deferences	p-value
1,3022 (0,4609)	3,7846 (0,4127)	(2,4824)	0.000
S1 Accounting 1,3022 (0,4609)	PPAk 6,6721 (0,4733)	Deferences (5,3699)	0.000

\*base on average deference test

Based on Table 1 shows that there is a difference between the attitudes of earnings management courses where S1 Regular courses accounting reject more earnings management than the other three courses. The possibility of this is due to a curriculum that emphasizes ethics is a regular S1 accounting curriculum.

## Part II

Factor 1: Misstate (tendency to make misstatements in the financial statements)

The first factor in the study were tested in the second part is Misstate the tendency of students to perform misstatement in the financial statements. This factor is formed by four questions contained in the question number 1, 6, 8 and 10 answers to the question in the second part of this is measured by using a Likert Scale with a scale of 1 - 7 In interpreting the questionnaire, question number 6, 8 and 10 were measured in reverse, meaning that the positive attitude shown by the response by the respondents disagreed. The amount is the higher total score illustrates a lower tendency to make misstatements in the financial statements.

Table 2. Average Response Factors between Studies Program for Misstate

	S1 Ak	D3 Ak	PPA
The company's main risk disclosure	4.81	4.84	5.41
I will not reveal the information needed by the company	3.56	3.77	4.19
Salary and benefits management should not be disclosed	4.08	3.57	3.67
I would intentionally cause one in the financial statements	5.46	5.17	5.60

In Table 2 it appears that students have a tendency Accounting Profession program that is significantly more positive than the other courses. However, no significant difference between other courses.

Factor 2:

Disclosure Financial Statements

The second factor in the study were tested in the second part is the tendency Disclosure students to disclose information in the financial statements. This factor is formed by three questions contained in the question numbers 5, 9 and 12 The number of the higher total score illustrates a higher tendency to make disclosures in the financial statements.

Table 3 Average Response Studies Program for students between Factor Disclosure

	S1Ak	D3 Ak	PPAk
Financial statement disclosures required intensive	5.72	5.80	6.31
Operating budget and profit targets should be disclosed	3.98	4.15	3.50
Reduction of discretionary expenses should be disclosed	5.31	5.04	5.16

According to the table 3 it can be concluded that the disclosure of information to the problem avoid differences between groups of respondents, it is likely due to the importance of adequate disclosure is an important thing that has been emphasized since the beginning of the term (for accounting students).

Factor 3:

Cost & Benefit

The third factor in the study were tested in the second part is the Cost & Benefit the students' perceptions of the burden of the company to make disclosure. This factor is formed by three questions contained in the question number 3, 4 and 7 In interpreting the questionnaire, answer questions measured in reverse, meaning that a positive attitude shown by the response by the respondents disagreed. The amount is the higher total score



depicts better perception of looking at the costs arising from the obligation of disclosure, or in other words not see disclosure as a burden, but rather as a necessity.

**Table 4 Average based Student Response Program for the Study of Factors Cost & Benefit**

	S1 Ak	D3 Ak	PPAk
The company burdened by accounting rules	4.11	4.62	4.75
The company was forced to disclose information that is not necessary	4.07	4.43	4.77

Factor 4:

Responsibility

The fourth factor is tested in the second part of the study is that students' perceptions regarding Responsibility to present the financial statements are informative for users. This factor is formed by two questions contained in the question numbers 2 and 11 in interpreting the questionnaire, answer questions 10 measured in reverse, meaning that a positive attitude shown by the response by the respondents disagreed. The amount is the higher total score illustrates a higher responsibility to present the financial statements are informative for users.

There were no significant differences among the students regarding course Responsibility factor, but so is the sex. The results are contained in the following table.

**Table 5 Average Response Factor Interagency Program for the Study of Responsibility**

	S1 Ak	D3 Ak	PPAk
Manager has a greater responsibility to the shareholders than employees	3,96	4,03	4,04
Independent auditor, not the manager, which protects the interests of investors	3,28	2,82	2,92

Furthermore, we will see if there is a difference between the perceptions of students S1, extension programs, and D3 programs PPAk the accounting profession programs. Program S 1 with D3 Significant differences between S1 and D3 are the perceptions of accounting as a career with a p value <than 5% (see table below)

**Table 6 Comparison of Perceptions Between S1 and D3**

Variables with statistically significant differences	p-value	p-value	Mean	Mean
Unlike S1 and D3	Mean deference test	Mann Whitney Test	S1	D3
Accounting as a Career	0.029	0.063	6.936	7.316

D3 students have a better perception than the students S1, S1 Program with PPAk In Table 6 it can be seen that between the S-1 and PPAk there are significant differences in all aspects with p value <5%.

**Table 7 Comparison between Perception S1 And PPA**

Variables with statistically significant differences	p-value	p-value	Mean	Mean
	Mean deference test	Man Whitney test	S1	PPAk
Accounting as a career	0.000	0.000	6.352	7.451
Accounting as a discipline	0.000	0.000	6.555	7.537
Accounting as a Profession	0.002	0.007	7.002	7.4355
Accounting as a group activity	0.000	0.000	6.963	8.2167

PPAk students have a more positive perception compared with the S-1 students. This is probably because the students get some PPAk Program subject that many professions and careers discusses subjects such as accounting Business & Professional Ethics and Financial Accounting Seminar subject. This is an input for the learning process in S1 where S1 students need to be given the right initial understanding of the accounting profession while further understanding will be given to programs PPAk.



In addition, faculty should also discuss the ethical aspects of the subject he teaches. Actually on any subject no charge ethical, but it seems this is still less emphasized in the teaching and learning activities in S1.

### **Conclusions and Recommendations**

The results of this study indicate that accounting students refused earnings management. These results are in accordance with accounting education they have received is taught to give higher priority to the needs of users of financial statements, and likely due to the difference in charge of earnings management in the curriculum of each course.

In answering the questions relating to the disclosure of information within the company, accounting majors have a more positive attitude, which means accounting students are more likely to avoid financial statement misstatements.

As for the factor disclosure (disclosure adequately) and the responsibility of the users of financial statements there is no significant difference in average although accounting students have higher scores. For the cost benefit factor, the opposite happened where accounting students feel more burdened because ethics charge is not emphasized at the beginning of the course students majoring in accounting, education focused on understanding the concepts and technical capabilities, it is likely to cause less of accounting students understand the benefits of the financial statements.

However, no significant differences between the new students and students regarding the cost-benefit factors, as well as for the three other factors that misstate, disclosure and responsibility.

Thus the effectiveness of the accounting curriculum to improve student ethics over financial reporting is still in doubt, in the sense that many improvements are still needed for the deepening and ethical topics.

The difference in the curriculum between studies in accounting education programs lead to differences in perception between students across the course. The results of this study indicate that student accounting profession has a better attitude for factors significantly misstate and cost-benefit. This is certainly in line with the objectives of the program are in charge of printing profession of public accountants, however for disclosure and responsibility factor is not a significant difference, means the professional education curriculum reform still needed to improve the ethics of accountants.

Teaching process in S1 has managed to give a better understanding to the students that accountants require interaction with the environment.

Therefore, the curriculum and teaching process in the S-1 needs to be improved to increase student interest in studying accounting and increase their perception of the accounting profession.

Regarding the differences between the programs, the results showed that student S1 has a lower perception than the D3 students about accounting as a career. S1 students have a lower perception compared to students in all aspects PPAk.

This indicates that the current accounting curriculum still needs to be improved. Necessary to study a variety of teaching methods to improve students' perceptions of the accounting profession. Require further study, whether students feel bored with the S1 approach has been more emphasis on the conceptual aspects.

The difference with PPAk understandable because PPAk program intended to improve the professionalism of accountants. If the student's perception of the accounting profession, the lower, can be interpreted that the interest of students to become accountants lower, it is feared the quality of future accountants will go down, because they are smart no longer interested in becoming an accountant. The task we all give a clear picture of the accounting profession.



### **Suggestion**

1. Survey conducted in this study at a university, therefore the results of this study could be "unique" in the sense that only happens in the university where he did a survey course.
2. Survey in this study was done in writing so that the possibility can not be separated respondents who do not understand the questions asked, the survey can also be done as well as interviews.
3. In view of the effectiveness of the curriculum, the survey can be conducted longitudinally over several years (the same respondents see the response changes from year to year).

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## **Self-Efficacy In Classroom Management Of Faculty Members Of The University Of Eastern Philippines**

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### **Abstract**

Our behaviour is influenced by how much we believe we can do things. If a teacher believes s/he can manage the classroom well, then there is a probability that s/he will be able to do it.

The study determined the level of self-efficacy in classroom management of faculty members of the University of Eastern Philippines. It determined the relationship of the level of self-efficacy to faculty profile such as age, sex, educational attainment and academic rank. Using the 8-item classroom management efficacy part of the Teacher Efficacy Scale, the study covered 136 faculty members of the University of Eastern Philippines who were sampled from all colleges. Descriptive correlational design was used and employed statistical tools such as frequency counts, means, ranking, percentages and multiple regression analysis.

Data revealed that majority of the faculty members are female, have age range of 41-60, with Instructor rank and have at least Doctoral units. The faculty members have a Very High level of self-efficacy on classroom management. No significant relationship was found between the level of efficacy and the sex, age, academic rank and educational attainment.

The study recommended the conduct of further studies correlating the level of efficacy with other teacher-related variables.

Key words: efficacy, classroom management, and faculty members

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## Introduction

Our behavior is influenced by how much we believe we can do things. This is what efficacy is all about. Efficacy is the teachers' belief or conviction that they can influence how well students learn, even those who may be considered difficult or unmotivated (Guskey & Passaro, 1994).

Classroom management is one of the most vital factors affecting the success of the teaching-learning process. Efficacy in classroom management is translated as the belief of a teacher that s/he can manage the classroom well. If this belief is high, then there is a probability that the teacher will be able to do it. In other words, if a teacher believes that he or she is capable of managing his or her classroom and conducting meaningful lessons, he or she will be more likely to do just that.

Self-efficacy beliefs are strong predictors of behavior (Woolfolk Hoy, 2004). Teacher efficacy belief took its basis from social cognitive theory, which was developed by Albert Bandura (1977). He stated teacher efficacy as a type of self-efficacy and defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1986). On the other hand, Tschannen-Moran, Woolfolk Hoy and Hoy (1998) defined teacher efficacy as "the teacher's belief in his or her capability to organize and execute course of action required to successfully accomplish a specific teaching task in a particular context".

Teacher self-efficacy is an important variable of teachers' behavior regarding classroom management. Woolfolk and Hoy (1990) found that the teachers with higher self-efficacy beliefs tend to behave more humanistic and to apply less control to the students in their classroom than the teachers with lower self-efficacy beliefs. In addition, according to study of Gibson and Dembo (1984), as classroom management behavior, teachers with high sense of efficacy beliefs persist longer to difficulties dealing with students and less criticize the wrong answers of the students. Similarly, Morin and Battalio (2004), found that teachers' sense of efficacy beliefs affect their behaviors toward the students who have misbehaviors. The teachers with high personal teaching efficacy look for the reasons of the misbehaviors of the students. They do not see the students as victim and do not think that misbehaviors were done deliberately.

## Statement Of Objectives/Problem

The study aimed to:

1. Determine the profile of the faculty members of the University of Eastern Philippines;
2. Determine the level of self-efficacy in classroom management of the respondents; and
3. Find if there is a relationship between the level of self-efficacy and the profile of the faculty in terms of age, sex, educational attainment and academic rank.

## Methodology

The study employed the descriptive correlational design. One hundred thirty six (136) faculty members from all academic units of the university were respondents of the study. A two-part instrument was utilized for the study. The first part elicited the information about the faculty members' age, sex, educational attainment and academic rank. The second part consists of an 8-item questionnaire on efficacy in classroom management lifted from the Teacher Efficacy Scale (Tschannen-Moran and Woolfolk Hoy, 1998). After computing the means of the efficacy, the level of efficacy of the respondents was classified as Very High (4.20 – 5.00), High (3.40 – 4.19), Average (2.60 – 3.39), Low (1.80 – 2.59) and Very Low (1.00 – 1.79). Data were treated statistically using frequency counts, percentages, means and multiple regressions.

## Results And Discussion

### *Profile of the Respondents*

Table 1 shows the profile of the respondents in terms of age, sex, academic rank and educational attainment. Data revealed that majority of the faculty members are female, have age range of 41-60, with Instructor rank and have at least Doctoral units.



Table 1. Profile of the Respondents

	Profile	f	%
Sex	Male	43	31.62
	Female	93	68.38
	Total	136	100.00
Academic Rank	Instructor	64	47.06
	Assistant Professor	39	28.68
	Associate Professor	29	21.32
	Professor	4	2.94
	Total	136	100.00
Age	Less than 30	10	7.35
	30 – 39	29	21.32
	40 – 49	36	26.47
	50 – 59	44	32.35
	More than 60	17	12.50
	Total	136	100.00
Educational Attainment	PhD/EdD graduate	43	31.62
	with PhD/EdD units	29	21.32
	MA/MS graduate	31	22.79
	with MA/MS units	30	22.06
	AB/BS	3	2.21
	Total	136	100.00

#### *Efficacy in Classroom Management*

Table 2 shows the level of efficacy of the respondents. Data shows that majority of the faculty members have a Very High level of self-efficacy on classroom management.

Table 2. Efficacy in Classroom Management of the Respondents

Level of Efficacy	f	%
Very High	108	79.41
High	22	16.18
Average	3	2.21
Low	3	2.21
Total	136	100.00

Table 3 shows the items in the efficacy questionnaire. The respondents rated all items Very High. This means that they really believe they can impose a good classroom management system. The table also shows that the highest mean was on “how much can you do to get students to follow classroom rules.” Classroom rules are the most basic policies that could ensure a smooth classroom management flow. This indicates that the faculty members believe that they could do a lot in enforcing classroom rules among students. However, the lowest mean, though still on a very high level of efficacy, is “to what extent can you make your expectations clear about student behavior.” In the first day of classes where faculty members orient the class on the vision, mission, goals and objectives of the university and college, leveling of expectations is a very vital activity. The low mean indicates that conveying expectations to students is sometimes not given emphasis.

Table 3. The Self-Efficacy in Classroom Management Items

Indicator	Mean	Interpretation
How much can you do to control disruptive behavior in the classroom?	4.59	Very High
To what extent can you make your expectations clear about student behavior?	4.51	Very High
How well can you establish routines to keep activities running smoothly?	4.61	Very High
How much can you do to get students to follow classroom rules?	4.70	Very High
How much can you do to calm a student who is disruptive or noisy?	4.63	Very High
How well can you establish a classroom management system with each group of students?	4.63	Very High
How well can you keep a few problem students from ruining an entire lesson?	4.57	Very High
How well can you respond to disobedient students?	4.53	Very High
Grand Mean	4.60	Very High

#### *Relationship between Profile and Efficacy in Classroom Management*

Table 4 shows the summary table of the test of relationship between the profile and efficacy in classroom management. No significant relationship was found between the level of efficacy and sex. This is in agreement with the finding of Tschannen-Moran & Woolfolk Hoy (2001) Murshidi et al. (2006) supported this result with their findings. They found no significant difference between male and female beginning teachers in Sarawak regarding overall teacher efficacy. Similarly, in their study, Tarmalu and Öim (2005) applied Gibson and Dembo's (1984) TES scale to 255 Estonian practicing and student teachers and found no gender differences with respect to teachers' self-efficacy. With a population of Turkish pre-service teachers, Savran Gencer and Çakıroğlu (2005) found that there is no significant difference between male and female teachers' scores of personal science teaching efficacy and science teaching outcome expectancy beliefs. On the contrary, Murshidi et al. (2006) found that there were not significant difference between male and female teachers' overall sense of efficacy, instructional strategies efficacy, classroom management efficacy, and student engagement efficacy. Cheung (2006) also reported that female teachers had higher general teacher efficacy than male teachers. Another exception was found with the study conducted with Hong Kong primary in-service teachers (Cheung, 2006). The author reported that female teachers of in-service primary teachers had significantly higher general teaching efficacy than male teachers. No significant relationship was found between the level of efficacy and age. This is in agreement with the finding of Tschannen-Moran & Woolfolk Hoy (2001). In addition, no significant relationship was found between the level of efficacy and the academic rank and educational attainment.

Table 4. Beta Coefficients for the test of Relationship

Predictors	B	Sig.	Interpretation
Sex	.045	0.606	Not Significant
Academic Rank	.227	0.077	Not Significant
Age	.027	0.801	Not Significant
Educational Attainment	.119	0.270	Not Significant

Dependent variable: efficacy

#### **Conclusions**

The faculty members are efficacious in terms of classroom management. They have a firm belief that they can manage the teaching-learning process well. This confidence could be attributed to their being faculty members of college students, whose behavior they may suppose would not be much of a problem compared to, elementary and high school student. The efficacy is not related to the age, sex, academic rank and educational attainment. There could be other variables, which may predict or influence efficacy in classroom management.

#### **Recommendations**

1. Another study correlating the level of efficacy with other teacher-related variables is suggested.
2. A study correlating the level of efficacy with actual classroom management evaluation is also suggested.

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## **Academic Performance, Aspirations, Attitudes And Study Habits As Determinants Of The Performance In Licensure Examination Of Accountancy Graduates**

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### **Abstract**

The graduates it produces often determine the quality of education offered by an institution. In like manner, the quality of graduates produced by an institution is measured by their performance in licensure examinations.

The study determined the level of student's academic performance, aspirations, attitudes towards accounting and study habits. It also determined the performance of the graduates in the Certified Public Accountant (CPA) licensure examination, as well as the relationship of the academic performance, aspirations, attitudes towards accounting and study habits and the performance in the licensure examination.

One hundred twenty-four (124) respondents were considered in the study which utilized the descriptive-correlational method. A survey questionnaire determined the level of academic performance, aspirations, attitudes and study habits. Official results of the CPA Licensure Examination were retrieved from the Professional Regulation Commission. The study employed frequency counts, weighted means, ranking and regression analysis as statistical tools.

The respondents had good academic performance, high level of aspiration, favourable attitude towards Accounting and good study habits. Performance of graduates is above the national passing percentage, though, graduates do not make it in the first attempt. Graduates performed best in Theory of Accounts while the weakest performance is in Practical Accounting I. Academic performance, attitudes towards accounting and study habits are significantly related to the performance in the examination while level of aspirations was not related.

The study recommended the emphasis of students' persistence to work toward their goals, study habits and passion in accounting in admitting prospective students. Regular assessment through qualifying examination is also recommended to improve performance.

Key words: academic performance, aspirations, attitudes, and study habits, accountancy licensure examination

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## Introduction

The quality of education offered in a certain college or the graduates it produces often determine institution. In like manner, the quality of graduates produced by an institution is measured by their performance in board examinations. This performance based on the percentage of passing in the licensure examination serves as a barometer that gauges the quality of education they acquired in a particular school.

For the last five years, the average passing rate of the University of Eastern Philippines in the Accountancy Licensure Examination is 40.48% or four (4) examinees out of 10. This result shows that not all graduates of the university were prepared for the examination. Some honor graduates even failed. It is therefore imperative that innovative and continuous intervention programs be undertaken to improve the UEP accountancy graduates' performance in CPA board examinations. This intervention program must be research-based and therefore this study was conducted to derive findings that will serve as basis of the program.

## Statement Of Objectives/Problem

The study aimed to:

1. Determine the level of students' academic performance, aspirations, attitudes towards accounting and study habits;
2. Determine the level of performance of the respondents in the Certified Public Accountant Licensure Examination; and
3. Ascertain the relationship between academic performance, aspirations, attitudes, study habits and the level of graduates' performance in the CPA licensure examination.

## Methodology

One hundred twenty-four (124) respondents who were takers of the CPA board exam for the period May 2012-October 2013 were considered in this study, which utilized the descriptive-correlational method. Official results of the CPA licensure examination were retrieved from the Professional Regulation Commission. Academic performance was measured through the college grade point average. The questionnaire for students' aspirations, attitude towards accounting and study habits was modified based on the instrument of Barreda (1998). Frequency counts; percentages, weighted mean and multiple regression analysis were used as statistical tools.

## Results And Discussion

### *Student's Academic Performance*

Table 1 shows that the bulk of the respondents belong to the grade range of 1.76-2.0 and 2.01-2.25. The results could be attributed to the strict retention policy of the program that requires an average of 2.5 or higher to be able to proceed to the next accounting subject. Because respondents who graduated with honors comprised only 25 percent and majority graduated without honors, is a proof that the Accountancy program is a difficult course and entails more time to be devoted in studying, and thus, improving one's chance in passing the board examination.

Table 1. Respondents according to Grade Point Average

College Grade Point Average	Frequency	Percent
1.26 - 1.45	1	1.0
1.46 - 1.75	25	24.5
1.76 - 2.0	27	26.5
2.01 - 2.25	30	29.4
2.26 - 2.5	17	16.7
2.25 - 3.0	2	2.0
Total	102	100.0

### *Level of Student's Aspirations*

Table 2 shows that the respondents generally had high level of aspiration. Ultimately, what they wanted to achieve is a home where peace and love abide, while sharing their success with other people and enjoying their life. This shows that what they really desire is beyond material possessions. In the end, they would always go back to the basic unit of the community who has molded them to what they have become, and later see themselves as molders of future generations, thus being a part of a home that is surrounded by love and peace. The attainment of success is not only for them alone but also for other people. Moreover, they also have high





aspirations of enjoying life after studies. This means that after passing the board exam, they hope to enjoy working and the opportunities that would be offered by the circumstances.

However, the desire to be regarded as leaders and excel over their classmates in all subjects, were only considered moderate. This means that generally students were more contented on being followers than leaders, which is one of the attributes of an accountant, where they will only provide data that will be useful in decision making by top-level management. Most of the respondents do not really aspire of leading a team for they have not experienced doing it before. They may still have some doubts on their capabilities and that they may have thought that they still need to learn a lot for them to be regarded as effective leaders. Further, excelling over their classmates was not also part of their aspirations. A healthy competition exists among them, which means that they wanted to succeed but not at the expense of others.

Table 2. Students' Level of Aspirations

Indicator	Mean	Interpretation
I wish I have a home where peace and love abide.	2.82	High
I like to share my success with other people.	2.75	High
I wish I could find time and opportunity to really enjoy life after studies.	2.75	High
I would like to accomplish something of great significance.	2.71	High
Despite some failures and difficulties I still wish to succeed.	2.68	High
I like to travel and see many places.	2.63	High
I like to do my very best in whatever I undertake.	2.54	High
I like to experience novelty and change in my daily routine.	2.50	High
I wish to do better than my parents by being serious in my studies.	2.47	High
I want to be an innovator than an imitator through independent study.	2.47	High
I want independence in solving problems.	2.47	High
I would like to be a recognized authority in some jobs, professions.	2.42	High
I like to be regarded by others as a leader.	2.12	Moderate
I wish to excel over my classmate in all subjects.	1.82	Moderate
GRAND MEAN	2.51	High

#### *Level of Student's Attitude towards accounting*

Table 3 shows that the respondents generally had favorable attitude towards accounting as manifested by a 3.85 grand mean. Specifically, they highly favored the statements that "accounting develops their ability to think logically and reason out correctly", "accounting is important as any other subjects", "they can see much importance in accounting" and "accounting is a stimulating subject". Accounting subjects are indeed a combination of conceptual and practical concepts, one cannot solve a problem without analyzing the basic idea behind that problem, it is on this ground that respondents would look at accounting as one that helped them develop their logical thinking. Moreover, respondents treated accounting as important as any other subject, being their major field of specialization. In as much as accounting is treated on the same ground with other subjects, students see the importance of these subjects in terms of completing their academic requirements to finish the course.

However, the respondents were unfavorable on the statement that accounting is the easiest of all the subjects. In other words, they find accounting a difficult subject. According to Crawley, et al, as cited by Beaton (1996), this attitude may have reinforced or downplayed to affect behavior decisions by students, which means that their unfavorable attitude toward accounting being the easiest of all the subjects, may have motivated them to strive and study harder or may have discourage them to a point that even the basic problem may be thought as difficult without really understanding it first.

Table 3. Level of Respondents' Attitude towards Accounting

Indicator	Mean	Interpretation
Accounting develops my ability to think logically and reason out correctly.	4.42	Highly Favorable
Accounting is important as any other subject.	4.40	Highly Favorable
I can see much importance in accounting.	4.25	Highly Favorable
Accounting is a stimulating subject.	4.22	Highly Favorable
I enjoy the challenge presented by an accounting problem.	4.15	Favorable





I enjoy myself seeing how rapidly and accurately I can work on Accounting Problems.	3.98	Favorable
I like accounting because it is practical.	3.96	Favorable
I am enthusiastic about Accounting and I have liking for it.	3.91	Favorable
I think accounting is fun and I always want to do it.	3.84	Favorable
Accounting thrills me and I like it better than any other subject.	3.83	Favorable
I would like to spend more time in school working on Accounting.	3.77	Favorable
I feel sure of myself in Accounting.	3.74	Favorable
I think accounting is the most enjoyable subject I have taken.	3.44	Favorable
I never get tired working with things related to Accounting.	3.29	Undecided
Accounting is the easiest of all subjects	2.54	Unfavorable
Grand Mean	3.85	Favorable

#### *Level of Respondents' Study Habits*

Table 4 shows that the respondents had generally "good" study habits with a grand mean of 3.48. The result revealed that respondents would study in a place that is quiet and has few distractions, and that they would study during their personal peak time of energy to increase concentration level and they would refer to books to provide a guide to follow if they are in doubt of the solution for a problem. The above statements are actually methods of study that were found effective by the respondents, which according to Steinberger and Wagner, as cited by Doromal (2011), should be done to attain success in study, as it does not only depend on ability and hard work but also on effective methods. Moreover, the result showed that respondents felt that much concentration is needed for them to really focus on the subject he is studying for them to really absorb the concepts and techniques.

The respondents rated "fair" the statement that they would lay aside returned examination, reports and homework without bothering to correct errors noted by teachers. This means that students give emphasis on the accuracy of their answers and they are interested as well in knowing whether they got the correct answer to the problem.

Table 4. Level of Respondents' Study Habits

Indicator	Mean	Interpretation
I study where it is quiet and has few distractions.	4.32	Very Good
I try to study during my personal peak time of energy to increase my concentration level.	4.31	Very Good
When I doubt the correct solution for a problem I refer the book to provide a guide to follow.	4.30	Very Good
If time is available, I take a few minutes to check over my answers before turning in my examination papers.	4.11	Good
When test papers are returned, I find time to review the questions that I missed.	4.01	Good
I quiz myself over material that could appear in future exams and quizzes.	3.88	Good
I prefer to study my lessons alone rather than with others.	3.84	Good
I have enough time for school and fun.	3.77	Good
I take notes as I read my textbooks.	3.74	Good
I give special attention to accuracy and neatness of solutions to problem sets and other and other work to be turned in.	3.73	Good
I study three or more hours per day outside class.	3.64	Good
I say difficult concepts out loud in order to understand them better.	3.61	Good
I complete my homework/assignment on time.	3.45	Good
I copy the diagrams, drawings, tables and other illustrations that the teacher put on the blackboard.	3.44	Good
During examinations, I forget the concepts, formulas, and other details than I really do not know.	3.28	Average
I start papers and projects as soon as they are assigned.	3.28	Average
I keep my assignments up to date by doing my work regularly from day to day.	3.22	Average
I utilized the vacant hours between classes for studying so as to reduce the evening's work.	3.20	Average
I hesitate to ask my teacher for further explanation of an assignment that is not clear to me.	3.10	Average
I put off solving accounting problems and doing drill exercise.	3.03	Average
With me, studying is hit-or-miss proposition depending on the mood I'm in.	2.89	Average
I make questions from a chapter before, during, and after reading it.	2.89	Average
I am careless of the solutions when answering examinations questions.	2.82	Average
I memorized rules, definitions of technical terms, formulas, etc. without really understanding them.	2.72	Average



I lay aside returned examinations, reports and homework/assignments without bothering to correct errors noted by the teacher.	2.43	Fair
Grand Mean	3.48	Good

#### *Performance in the CPA Licensure Examination*

As revealed in Table 5a, 13 or 12.7 percent were on conditional status, 45 or 44.1 percent failed, while only 44 or 43.1 percent passed. Compared to national passing percentage for these periods of 38.27%, it can be said that the performance is above the national. But still, the data showed that majority of the respondents did not make it to the board exam. In other words, for every 10 examinees from UEP, only four (4) would emerge as passers, although the rest will still be given chance the take the next board exam. The findings confirmed the statement of Bala (2008) that CPA board exam has a high mortality rate in terms of the number of examinees who failed.

Table 5a. Level of Performance of the Respondents in the CPA Licensure Examination

Performance Level	Frequency	Percent
Conditional	13	12.7
Failed	45	44.1
Passed	44	43.1
Total	102	100

Table 5b shows that among the seven board exam subjects, respondents performed best in Theory of Accounts which is a purely theoretical subject which focuses on the objectives, basic concepts, principles, and terminology of financial accounting and financial statements, including related issues and topics, while respondents were weakest in Practical Accounting 1 which is supposed to be an application of concepts they learned in Theory of Accounts. The result shows that the respondents lack practical skills, which means that they find difficulty in applying the concepts they learned to the related problems posed into them.

Table 5b. Performance of the Respondents in the CPA Licensure Examination per Subject

Subjects	Passed		Failed		Average
	F	%	f	%	
Theory of Accounts	74	72.55	28	27.45	77.33
Auditing Problem	57	55.88	45	44.12	73.57
Management Advisory Services	59	57.84	43	42.16	73.13
Practical Accounting 11	56	54.90	46	45.10	72.06
Business Law and Taxation	55	53.92	47	46.08	71.36
Auditing Theory	45	44.12	57	55.88	70.61
Practical Accounting 1	36	35.29	66	64.71	69.51

#### *Relationship between Academic Performance, Students' Aspirations, Attitudes, Study Habits and the Performance in the CPA Licensure Examination*

Among the variables significantly related to performance in the CPA licensure examination is the academic performance of the student in college with a significance level of 0 that is less than the 0.05 margin of error. This means that the null hypothesis is rejected. A beta coefficient of 5.043 indicates that for every unit increase in the GPA average of the student, there will be a corresponding increase in licensure examination result. This coincides with the statement of Banez (2002) that if a person has excelled academically, there is a greater chance for him to have a successful performance in the examination. Looking back at Table 6 that shows that 74.6 percent of the respondents were not honor graduates and comparing with the 56.8 percent of respondents who were not able to pass the board examination, clearly indicates that honor graduates have a higher chance of passing the CPA licensure examination, although, not to be considered as an absolute truth since some of these honor graduates failed in the board examination that might call for further studies. The above findings were confirmed by the result of the study of Navarro (2011) that academic performance is the best predictor of the NLE performance of their nursing students. Ong and Palompon (2012) found that grade point average is highly correlated with performance. Besique (2000) presented the same predictive ability of college grade point average in students' success in the licensure examination. The same is true with the findings of Abellera (2012) that academic performance relates with the CPA licensure examination performance. The result indicates that the academic performance of a particular student sums up his level of preparation for the board exam. His five-year stay in the college as quantitatively measured by his grade point average, serves as one of the best predictor of



his success in board exam. This shows that generally students who have an ultimate goal of passing the board exam must do well in his academic requirements more than the extra-curricular activities.

Further, the result shows that there was no significant relationship between student aspirations and performance in the CPA licensure examination. The respondents were found to have generally high aspirations but exhibited only a 43.2 passing percentage. This confirms Carpio's (1995) findings that student aspirations were not significantly related to their performance in the theoretical and practical aspects. This could imply that despite their high aspirations in life, if their capability does not coincide with it, then students may find it difficult to achieve higher performance in the board examination.

Moreover, the findings revealed a significant relationship between a respondent's attitude towards accounting and their performance in the licensure examination as manifested by a 0.027 significance level, which is greater than the 0.05 margin of error. The beta coefficient of 2.667 means that for every positive unit increase in attitude of the respondents towards accounting there is a corresponding 2.667 increase in the licensure examination result.

Lastly, Table 6 shows that there is a significant relationship between study habits and performance in the CPA licensure examination with a significance level of 0.024, which is lower than 0.05 margin of error. The beta coefficient of 3.381 signified that for every unit increase in study habit, licensure examination performance would also increase by 3.381. This confirms the statement of Steinberger and Wagner, as cited by Doromal (2011) that success in study does not only depend on ability and hard work but also on effective methods of study, for its through good study habits that one will develop their ability to learn and understand their own potentials. It could be implicated that to attain mastery of the lesson taught in school, students should have good study habits. As cited by Balbalosa (2002), good study habits help the student in critical reflection in skills outcomes such as selecting, analyzing, critiquing and synthesizing and consequently, would lead to higher achievement. The above findings however, contradicts with that of Carpio (1995) who found out that study habits were not significantly related to performance.

Table 6. Beta Coefficients for the test of Relationship

Predictors	B	Sig.	Interpretation
Grade Point Average	-5.043	0.000	Significant
Students Aspiration	-1.906	0.641	Not Significant
Attitude Towards Accounting	2.667	0.027	Significant
Study Habits	3.381	0.024	Significant

## Conclusions

The students of the program have high hopes of becoming successful in the future. This could be implicated that the Accountancy program is viewed as a stepping-stone for them to achieve the desires that they want to attain. Hence, despite the difficulty posed by the accounting subjects, they still have favorable attitude towards it. The favorable attitude can also be attributed to the approach they employed in studying their subjects. The achievement of the CPA license is generally dependent on persistence in working towards that goal, specifically through studying hard while in college, coupled with positive attitude and behavior towards accounting. The positive attitude towards accounting paired with effective study habits might lead to higher academic performance and therefore higher chance of passing the board exam. To be able to graduate in the program and later on pass the board examination, there is a need for the prospective freshmen to have a passion for the field they are entering into because no matter how effective the other factors would be, at the end of the day, what will make them really successful is their love for the field that will make them conquer all adversities that they may face.

The UEP performance in the licensure examination is not consistent when compared to the national passing percentage. The examinees are generally weak on Practical Accounting, which at the same time has the lowest number of passers among the seven subjects. This connotes that the students have poor grasp of practical application of the concepts that they have learned. This can also be attributed to lack of hands-on experience of students on the realistic aspect of accounting. Generally, good academic performance, positive attitude and effective study habits give an assurance of passing the CPA board examination.



## Recommendations

1. The study recommends the emphasis of students' persistence to work toward their goals, study habits and passion in accounting in admitting prospective students. In this case, valid instrument should be developed to assess the above qualifications. The interviewer should also be a keen observer so as to fairly assess the students.
2. Regular assessment through qualifying examination is also recommended to improve performance. Grades of the students should be strictly monitored along with the strict implementation of the retention policy.
3. Further studies should be conducted on other possible factors that could affect performance in the CPA Licensure Examination.

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## **Areza Town Center Inventory System of Dealership**

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### **Abstract**

The research study entitled “Areza Town Center Inventory System of Dealership” was an information technology (IT) system developed for the management and staff of Areza Town Center located in Pagsanjan, Laguna, Philippines. The main purpose of the study was to develop an IT system that can monitor and record the transaction and the information of customers and the accurate computation of billings, services and annual income of the company. Specifically, it aimed (1) To develop a system that will meet the requirement of the Areza Town Center; (2) To create and analyze the use of the IT system depending on the process of the transaction and functions of the Areza Town Center; (3) To test and evaluate the system in terms of system usability, design, user-friendliness, error handling and system security; and (4) To implement the system among the staff and management of the Areza. The Areza Town Center Dealership Inventory System is developed for the purpose of inventory of information and facilitate the management of Areza Town Center. The system has a restriction for any unauthorized used, decoding and manipulation of information on the system. It can handle a large amount of information and the system can assure security of data records. The system run using Pentium 4 and higher processor, at least 50 MB for the program and 1 GB for the database to store records of transactions, sales, stocks and income. The system run with the use of Microsoft XP and Windows 7 as operating system. The capstone project is a local area network (LAN) based system and it does not need an internet connection to operate. The inventory system was presented to the client for verification of the details to identify errors and clarify the process of the company. To determine the overall performance of the developed system, the researchers used a questionnaire-checklist, which includes indicators such as system design, usability, user-friendliness and error – handling. The questionnaire-checklist was validated and was distributed to the selected respondents. A total of thirty (30) respondents were purposely chosen to assess the performance of the system using the questionnaire-checklist. All the data were gathered, tabulated and the overall performance of the system was determined through statistical tools such as weighted mean and standard deviation as well as the analysis of variance to determine the overall performance of the system. The researchers used the Microsoft Excel for the computation of the statistical results. In light of the findings obtained, it was concluded that the Areza Town Center Inventory System of Dealership was highly usable, has a good design, and has excellent error-handling, highly user friendly and highly secured. Based on the conclusion drawn, the following were recommended: (1) the Areza Town Center Dealership Inventory System is recommended to be used by the Areza Town Center; (2) the researchers may enhance the database of the system by adding database backup and more additional features; and (3) future researchers may use this study as their reference when they conduct similar study.

**Keywords:** Areza Town Center, Inventory System of Dealership, System Development Life Cycle (SDLC), transaction record

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## Introduction

Computer is the world's wonderful gift of science to the modern man. Computer has been part of everyone's life in every activity that we are doing. With the use of computing devices like computers makes our daily life easy. Almost all kind of works everywhere are now using computer as a tool that help us to improve and makes things in the easiest way. Computers were widely spread in every places in the world that even small offices nowadays were using it. Because of the demand of computing devices in doing every work, most of us rely on what it is capable of. It stores data as we all know in which information are constant and the user would see it outdated. There are a lot of system, one of it is the monitoring and inventory system, in which you can monitor every single data and information. Monitoring system in which devices that automatically monitor biometrics measurements in critical care and specialty areas and inventory system which is the process whereby a business keeps track of the goods and material that is available. In its simplest sense it can be done manually by a count at the end of each day. In this way it is possible to keep a record of the goods coming in to the business and goods being sold. This is to improve and enhance data processing in a specific field or area where the system is being used.

The researchers have plan to do a system for Areza Town Center and they want it to be more productively with the use of technology and adopt to the different changes happen in the new generation. Using the inventory system for Areza Town Center it may lessen the use of papers, improve their data storing, data computation will be more accurate and it may lessen their effort and can maximize their time in doing other important things. Data and information is also secured. Sharing of information is possible between the manager, customer and staffs.

The Areza Town Center is one of the branch of Areza under the Areza Group of Companies located at Biñan, Pagsanjan Laguna, Philippines. Because of their popularity because of Areza Mall and having a nice location near the high way there are a lots of customers coming on them for buying cars, parts of cars, and avail other services they are offering that somehow causes them some difficulties especially in terms of data computation. It also takes a lot of time in searching for records and recounting payments of the customer. They also used manual inventory in which they are writing it on a piece of paper before they type it again for printing. Weekly and monthly report of sales and income is manually done which is prone to errors. It is difficult and hard for them to manage a large amount of data for data processing. This shows that Areza Town Center doesn't have a system suited to meet their needs. If this system will change this was a start for Areza Town Center for better. The system Areza Town Center Dealership Inventory System contains information about car sales and its customer, tenants, and operational expenses of the company. This includes the customer information and the car stock. It can also determine if the stock is not available or it is below five. It also contain the tenants with their location number and company name. Through the use of system it can calculate payments and produce reports of the car customer, tenants and expenses from the operation of the company. Expected that the inventory system of Areza Town Center has the scope which the researcher will conduct gathering of data and information in a safe and legal way. The researcher will also make sure that everything is secured enough to gain trust from the client as well as the system that will handle their data and information.

## Objectives

The general objective of the study was to develop a system that will help and provide a better management and enhanced business transaction. This make the economic and business status of Areza Town Center to be well monitored without giving to much effort and accurate computing.

Specifically, the aimed to: (1) To develop a system that will meet the requirement of the Areza based on their hardware and software needs; (2) To create and analyze the use of the system depending on the process of the transaction of the Areza Town Center; (3) To design a system that will provide functions that will helped the Areza Town Center; (4) To test and evaluate the system in terms of system usability, design, user-friendliness, error handling and system security; and (5) To implement the system among the staffs and management of the Areza.

## Methodology

The researcher applied the developmental method of the research. This study used the Developmental Method of Research. According Richey, Rita C. (1994), developmental research has defined as the systematic study of designing, developing and evaluating instructional programs, process and products that must meet criteria of internal consistency and effectiveness. This blend is most obvious in developmental research, which involves the production of knowledge with the ultimate aim of improving the processes of instructional design, development, and evaluation. It is based on either situation-specific problem solving or generalized inquiry procedures.



Developmental research, as opposed to simple instructional development, has been defined as "the systematic study of designing, developing and evaluating instructional programs, processes, and products that must meet the criteria of internal consistency and effectiveness."

The system provided database for the purpose of viewing the information in the system and it can also be printed on a hard copy. The capstone project is a local area network (LAN) based system and it does not need an internet connection to operate. The design of the system was created to be easy and understandable to use when it comes to its interface. The researchers applied the Systems Development Life Cycle (SDLC) which was the basis for the system development and analysis. In planning phase, the researchers identify all the needed data and information that the client can give to be able to finish the inventory system. Gathering the requirements and what should be they needing is what the researchers do. The researcher knew that finishing their project is possible therefore they proceed to analysis phase. In this phase, the researcher gathered all the things they will be needing to, to accomplish their project that includes data and information, money, pictures, etc. After collecting their resources they will be needing to, researchers analyze and predict the possibilities and other option: to stop the development of inventory system. This includes the logics and the terms that the researcher will be using for the inventory of dealership of Areza. The researcher also took time in thinking on how the system will work in terms of its function, what should be the first function, depending on the first thing that they will be doing during the client's process and the time when everything is finalize for the preparation of the system, the researcher conceptualize everything for the development of the system. This includes the proper title to be used in the system. They also choose the appropriate terms of words to be used in the buttons and functions of the system. In the design phase, the design or the appearance of the system will be prepared. They think the appropriate color and background that they will be using in developing the system. The researchers created a Flowchart for them to understand on how they will work in creating the system. In the development phase, the researcher is starting to build their system. Preparing all the things that they will be needing to and getting started with, factual and relevant information are gathered so that the researchers can easily notice errors and what must be corrected. In the Evaluation Phase, the system is going to present to selected respondents to determine if the system has successfully achieve its intended goals.

The inventory system was shown to the client for some verification of the details to identify errors and clarify the process of the company. The testing of the system comes first before it implementing to the client. To test the system, the researchers tried step-by-step process of the system through beta testing. The Beta testing was used to see if the system runs and to see for some bugs and errors within the system. To determine the overall performance of the developed system, the researchers used a questionnaire-checklist, which includes indicators such as System design, usability, user-friendliness and error – handling. The questionnaire-checklist was validated by an expert and thereafter was distributed to the selected respondents. The system was evaluated by five (5) IT system expert and developer, (10) faculty members and five (5) BSIT students of the College of Computer Studies of Laguna State Polytechnic University, three (3) management officers of Areza Town Center and twelve (7) staff of Areza Town Center as direct users. A total of thirty (30) respondents were purposely chosen to assess the performance of the system using the questionnaire-checklist. After the questionnaire was administered to the respondents and all the data were gathered, tabulated and the overall performance the system was determined through statistical tools such as weighted mean and standard deviation as well as the analysis of variance to determine the overall performance of the system as perceived by the respondents. The researchers used the Microsoft Excel for the computation of the statistical results.

## **Results And Discussion**

Based on the statistical treatment applied, it shows that the system can be easily used by the average mean of 4.63, standard deviation 0.06 and verbally interpreted as highly usable. It also shows that the system performs the intended function with relevant information. The system was highly usable as reflected by the average mean and standard deviation.

The system can be easily understand by the users as showed by the average mean of 4.60, standard deviation of 0.095 and verbally interpreted as excellently designed. The results proved that the system design was excellently designed as reflected from the average mean and standard deviation.





It shows that the flow of the system can be easily understand as revealed by the average mean of 4.62, standard deviation of 0.03 and verbally interpreted as highly user friendly. These results proved that the system was highly user-friendly as reflected from the results of average mean and standard deviation.

It shows that the system can maintain its intended function as revealed from it mean and standard deviation and interpreted as excellently designed.

The results proved that the system was excellently designed as reflected from the results of the statistical treatment.

Table 1. Summary of Statistical Results

Indicator	Weighted Mean	Ave. Std. Deviation	Verbal Interpretation
System Usability	4.62	0.05	Highly Usable
System Design	4.60	0.09	Excellently Designed
User- Friendliness	4.62	0.03	Highly User Friendly
Error Handling	4.62	0.01	Excellent
System Security	4.7	0.07	Highly Secured
Ave. Mean and Std. Deviation	4.63	0.05	Highly Acceptable

### Conclusion And Recommendations

In light of the findings obtained, it was concluded that the Areza Town Center Dealership Inventory System was highly usable, has a good design, and has excellent error-handling, highly user friendly and highly secured.

Based on the conclusion drawn, the following were recommended:

(1) the Areza Town Center Dealership Inventory System is recommended to be used by the Areza Town Center as the tool for the transaction of their company; (2) the researchers may enhance the database of the system by adding database backup and more additional features; and (3) future researchers may use this study as their reference when they conduct related study.

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## **Corporate Leadership Responsibility of Global Top Executives at the Cavite Export Processing Zone Authority**

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### **Abstract**

This study was designed to evaluate the profile of various foreign top-level managers of multinational companies operating at the Cavite Export Processing Zone as a basis for proposing a model for global corporate leadership responsibility (GCLR). The study was conducted in 2011 to 2012. The setting was multinational companies located at the Cavite Export Processing Zone: Cavite Export Processing Zone Authority in Rosario, Gateway Business Park in General Trias, and the First Cavite Industrial Economic Zone in Dasmariñas.

Key Word: Corporate Leadership, Responsibility, Export Processing

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### **Background of the Study**

It is clear that global change has become a way of life. The forces of technology, political freedom, territorial dispute, ethnic rivalries, economic competition, and entrepreneurial ingenuity are stronger than all the centuries of social, political, and economic fabric that have been woven to create the world into its current global workplace.

A typical global workplace in the Philippines is the Cavite Export Processing Zones at Rosario (Cavite Export Processing Zone Authority CEPZA, General Trias (Gateway Business Park, GBP) and Dasmarinas (First Cavite Industrial Economic Zone, FCIEZ).

Each of the multinational companies in these zones brings with them executives to manage the factories. They also bring with them varied cultures, work habits, and leaderships. The success of the global organization depends on how well their various cultures blend together to be able to develop global leadership skills needed to meet the changing, emerging, and increasing complex conditions of a global workplace.

### **Respondents of the Study**

The respondents of the study were presidents and vice presidents of multinational companies operating the Cavite Export Processing Zone in Cavite, Philippines. They are Koreans, Indians, French, British, Germans, Italians Japanese, Taiwanese, Singaporeans, Filipinos and Americans. There were 240 respondents.

### **Objectives of the Study**

This study was designed to evaluate the demographic profile of various foreign top-level managers of multinational companies operating at the Cavite Export Processing Zone as a basis for proposing a model for global corporate leadership responsibility (GCLR).

Specifically, the study was designed to elicit answers to the following questions:

1. What is the GCLR profile of these top level managers in terms of:
  - 1.1 Need for achievement/drive;
  - 1.2 Need for power;
  - 1.3 Ethics;
  - 1.4 Cognitive ability; and,
  - 1.5 Self-confidence?
2. What is the global mindset/personal characteristics (GMPC) of these top level managers in terms of:
  - 2.1 Strategy/Structure;
  - 2.2 Corporate Culture; and,
  - 2.3 People?
3. Based on the findings of the study, what GCLR can be proposed?

### **Conceptual Framework**

Figure 1 provides a conceptual framework for understanding corporate leadership of CEPZ top managers. It is created by integrating components of the different theories and models discussed in the review of related literature including some modifications made by the researcher suited for an export processing zone environment.

The input consists of external variables that influence the demographic profile and corporate leadership of the top manager in a global company. These external variables are the global mindset of a global manager. The influences of these external factors help mold the new corporate leadership of the global manager in a different setting.



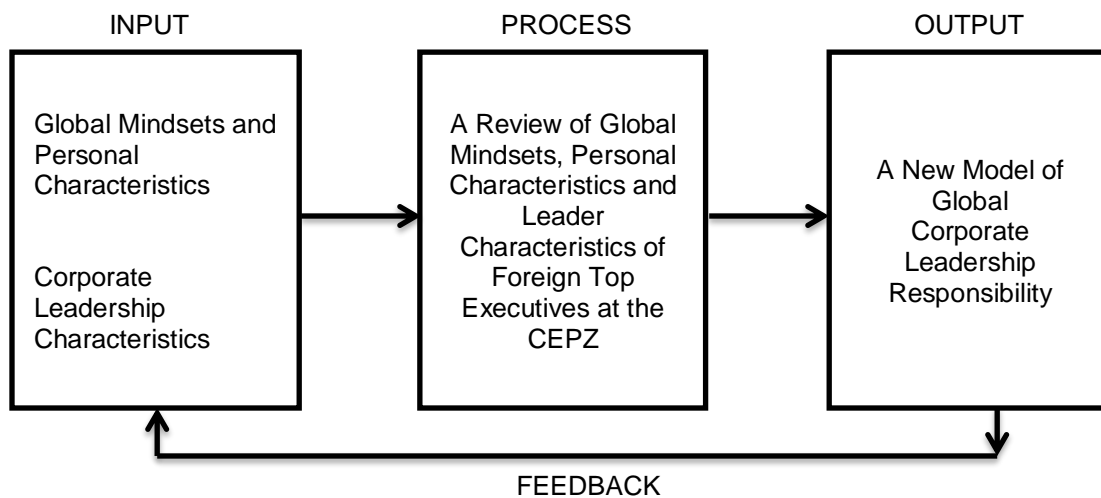


Figure 1: Conceptual Framework

*The global mindset.* To become an effective global manager, he must examine and modifies his existing mindset, essentially to broaden his perspective (Schein, 1985). A mindset is a way of being more than a set of skills, an orientation to the world that allows one to see certain things that others do not see (McNerny, 1996; Schorr, 2008). People with a global mindset tend to approach the world in six attributes, which are aligned with the three levels of globalization: strategy/structure, corporate culture, and people (Wilson and Elman, 1990).

*Mindset attributes for managing strategy and structure.* To manage strategy and structure, the manager must be concerned about his function and organization fit into the industry, how to create competitive advantages, and how to prepare himself to meet the increasing demands of a complex global environment (Hatch, 1993).

*Mindset attributes for managing corporate culture.* In addition to mindset attributes for managing strategy and structure, the successful global manager must align corporate culture and a mindset that balances the contradictory forces of control and flexibility (Jager and Ortey, 1997).

*Mindset attributes for managing people.* The ability to develop an effective global strategy and structure, then align and direct it through the proper corporate culture. This works well with multicultural teams as a basic way to accomplish their professional and organizational objectives (Brown, Dearlove and Rodrigues, 2002). Global organizations cannot be successful without teamwork among many different regions, product lines, and functions (Brown, Dearlove and Rodrigues, 2002).

*Knowledgeable.* Constantly driving for the broader picture necessarily makes one knowledgeable. His knowledge needs to be broad as well as deep with a well-developed international dimension that includes constant scanning of information and competitive and market conditions on a global basis (Mackay, 2005).

*Analytical.* The global manager has a highly developed analytical ability to deal with the complexity of global operations and the contradictions of global matrix organizations. Bloomberg (2008) noted that managers need to have a "systems view" of the world as well as "personal mastery" of their function.

*Strategic.* As Bloomberg (2008) also noted, a global manager is constantly challenged to align process across the organization rather than to manage in functional, geographic, or product silos.

*Flexible.* The speed and constancy of change, with the complexity of global organizations, lead many managers who have gained a reputation for technical expertise to feel overwhelmed by the lack of certainty they encounter (Der Hovanesian, 2008).



*Sensitive.* Since a global organization conducts the majority of its creative and operational work in multicultural teams, global managers must have sensitivity to cultural diversity that few people possess naturally (Mollenkamp et. al., 2008)

*Open.* Successful global organizations are always seeking for continuous improvement (Brown, Dearlove and Rodrigues, 2002). This does not happen unless the organization is willing to constantly reexamine its own performance.

## **Results And Discussions**

### *Leader Characteristics/Traits as Needs Expressed In the Workplace*

Five corporate leadership traits were identified to have significant effect on effective corporate leadership: need for achievement/drive, need for power, ethics, cognitive ability, and self-confidence.

*Need for achievement/drive.* Need for achievement/drive comprises five elements: motivation, ambition, initiative, energy, and tenacity.

The results show that there is no pattern on need for achievement/drive as a corporate leadership trait as to regional grouping, i.e., Asians, Europeans and North Americans. Regional grouping does not reflect similar leader characteristics/traits in terms of need for achievement/drive.

Need for achievement/drive as a leader characteristic/trait is crossing regional boundaries.

*Need for power.* The regional groupings do not reflect a common characteristics/traits in terms of need for power. Need for power as a leader characteristics/traits is crossing regional boundaries.

On the regional level, the need for power for Asians is exercised through influence (3.68) while the Europeans is through persuasiveness (3.75).

*Ethics.* Ethics-related work value does not demonstrate a pattern as regard to regional groupings. Nationalities from the same region do not exhibit common ethics-related work values. This tends to reveal that ethics in the workplace is crossing regional boundaries.

*Cognitive ability.* The results do not express common cognitive ability elements among regional groupings. Cognitive ability as a leader characteristic/trait is crossing regional boundaries.

*Self-Confidence.* There are seven traits that comprise self-confidence as a leadership trait: authoritative figure (Item 1), competitive games (Item 2), competitive situations (Item 3), assertive role (Item 4), imposing wishes (Item 5), standing out from group (Item 6), and routine administrative function (Item 7).

The Industry and most Asians are authoritative figures, while the Europeans and North Americans display different self-confidence traits.

### *Corporate Leadership Profile*

The surveyed top-managers, though coming from different countries with different work-related values and corporate leadership traits tend to express a common leadership trait in a foreign assignment.

Both Asians and Europeans are dominant in cognitive abilities.

### *Global Mindset/Personal Characteristics*

*Managing Strategy/Structure.* Except for the Italians, the Asian top-level managers (Japanese, Taiwanese, Koreans, Singaporeans, Indians, Filipinos) practice traditional mindset, i.e., they specialize/prioritize.

The Europeans (French, British, Germans) and North Americans (Americans), except for the Italians, manage strategy/structure with a global mindset, i.e., drive for broader picture and balance contradictions.



*Managing Corporate Culture.* Two Asians (Koreans, Indians) use traditional mindset, i.e., manage job/control results, in managing corporate culture.

The Europeans (French, British, Germans, Italians) and the Asians (Japanese, Taiwanese, Singaporeans, Filipinos) and Americans demonstrate a global mindset (Engage process/flow with change) in managing corporate culture.

#### *Derived Global Corporate Leadership Responsibility Model*

Two dominant cross-corporate leaderships were revealed in the study. These are directive and participative. To determine which variable(s) of the top-level managers' corporate leadership influence significantly their cross-corporate leadership, both directive and participative traits were run through a regression analyses. The corporate leadership that were used as independent variables are: cultural perception of time, interpersonal space, language, religion, need for achievement/drive, need for power, ethics, cognitive ability, self-confidence, strategy/structure, corporate culture, and people.

#### *The Industry: Derived Directive Regression Model*

The resulting regression equation for directive (cross leadership) as a dependent variable follows:

$$\begin{aligned} \text{DIRE} = & 0.397 + .152(\text{TIME}) - .202(\text{DIST}) - .0366(\text{LANG}) + .050(\text{RELI}) \\ \text{F } 14.692 \quad t & .633 \quad 2.767 \quad -1.982 \quad - .498 \quad 1.153 \\ \text{Sig. } .000 & .527 \quad .006 \quad .049 \quad .619 \quad .250 \\ & + .341(\text{NACH}) - .133(\text{NEPO}) - .179(\text{ETHI}) + .232(\text{COAB}) \\ & 2.901 \quad -1.489 \quad -1.008 \quad 3.313 \\ & .004 \quad .138 \quad .046 \quad .001 \\ & - .162(\text{SELF}) + .145(\text{SPEC}) + .116(\text{PRIO}) + .206(\text{ENGA}) \\ & -1.921 \quad 1.637 \quad 1.195 \quad 2.257 \\ & .056 \quad .103 \quad .234 \quad .025 \\ & + .187(\text{FLOW}) - .0278(\text{VALU}) + .188(\text{LEAR}) \\ & 2.531 \quad - \quad .399 \quad 2.611 \\ & .012 \quad .690 \quad .010 \end{aligned}$$

Where:

- DIRE = Directive
- TIME = Cultural perception of time
- DIST = Interpersonal space
- LANG = Language
- RELI = Religion
- NACH = Need for achievement/drive
- NEPO = Need for power
- ETHI = Ethics
- COAB = Cognitive ability
- SELF = Self-confidence
- SPEC = Specialize (Strategy/Structure)
- PRIO = Prioritize (Strategy/Structure)
- ENGA = Engage process (Corporate culture)
- FLOW = Flow with change (Corporate culture)
- VALU = Value diversity (People)
- LEAR = Lean globally (People)

*Need for achievement/drive.* Need for achievement/drive has significant positive effect on a directive leader top-level manager.

*Need for power.* Need for power has a negative effect on directive cross leadership.

*Ethics.* The ethics management practiced by the top-level managers has a negative effect of their being directive.

*Cognitive ability.* The cognitive ability of the top-level managers has a positive effect on their being directive.

*Self-confidence.* The contribution effect of self-confidence to being directive is negative effect.





*Traditional mindsets.* The top-level managers manage strategy/structure with a traditional mindset. The first management style is to specialize. It has a positive effect on their being directive. The second traditional mindset is to prioritize has a positive effect.

*Global mindsets.* The top-level managers manage corporate culture and people with a global mindset.

There are two elements under corporate culture: engage process and flow with change. Engage process has a positive effect on the top-level managers being directive. Flow with change has a positive effect. Two elements are also used to test the significance of managing people: value diversity and learn globally.

Value diversity has a negative effect on top-level managers being directive. Learn globally has a positive effect on top-level managers being directive.

*F-test for significance of the regression model.* The F-value of the whole regression model is 14.692 with a sig. = .000. This is highly significant at  $\alpha = .01$ , thus, the regression model is a valid tool to predict the cross directive leadership of the top-level executive.

*The Industry: Derived Participative Regression Model*

PART =	1.127	-.101	(TIME)	-.273	(DIST)	+	.0125	(LANG)	-	.025	(RELI)
F 20.849	t	2.058	-2.104	-3.066	.195						-.660
sig. .000		.041	.037	.002	.846						.510
		+ .227(NACH) - .120(NEPO) - .0787(ETHI) + .3130 (COAB)									
		2.205	-1.534	-1.010	5.111						
		.029	.127	.314	.000						
		-.0588(SELF) + .0225(SPEC) + .303(PRIO) + .7292 (ENGA)									
		-.798	.291	3.567	.914						
		.426	.771	.000	.362						
		+ .0573(FLOW) + .0341(VALU) + .165 (LEAR)									
		.887	.558	2.634							
		.376	.577	.009							

*Need for achievement/drive.* Need for achievement/drive has a positive change equal to .227 on being a participative leader. Its t-value = 2.205 with a sig. = .029. This is significant at  $\alpha = .05$  which corroborates the finding that need for achievement/drive has a significant effect on a participative leader.

*Need for power.* Need for power as an intervening variable has an inverse change effect.

*Ethics.* Ethics in the workplace has an inverse change effect on being a participative leader.

*Cognitive ability.* Cognitive ability has a positive change effect. This finding, confirms that cognitive ability has a dominant role in being a participative leader.

*Self-confidence.* Self-confidence has an inverse change effect.

*Global mindset.* The management of strategy/structure is tested using Specialize and prioritize as intervening variables for participative leader. Specialize has a positive change effect. Prioritize has a positive change effect on being a participative leader.

The management of corporate culture has two intervening variables: engage process and flow with change.

Engage process has a positive change effect to being a participative leader. Flow with change has a positive change effect.



The management of people has two intervening variables: value diversity and learn globally. Value diversity has a positive change effect on being a participative leader. Learn globally has a positive change effect on being a participative leader. This confirms that a top-level manager manages people with a global mindset.

*The regression model.* The regression model is highly significant at  $\alpha = .01$  that shows that the model is a valid tool to predict participative leader trait.

## **Conclusion**

*Global Corporate Leadership Responsibility.* The executives exhibited more than one corporate leadership. Nevertheless, the top-level managers that were surveyed demonstrated two dominant global corporate leadership styles. They were either directive or participative. A directive leadership provides guidance to employees about what should be done and how to do it, scheduling work, and maintaining standards of performance. Participative leadership is consulting with employees and seriously considering their ideas when making decisions.

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## **Human Resources Audit: Dimensions Increased Productivity and Job Performance (Ethnographic Study of the Bureau of Human Resources at the University of Widyatama)**

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### **Abstract**

Human Resources Audit is a systematic and objective assessment of the examination, as well as documenting the organizational functions that are affected by the management of human resources with a view to ensuring compliance with the principle of appropriateness, effectiveness and efficiency in the management of human resources for the achievement of organizational goals, objectives and functions of the work program to improve the productivity performance of the staff of the University of Widyatama.

This study tries to reveal the importance of the audit of human resources in achieving the productivity and performance of employees at the University Widyatama. This research was conducted on the assessment of the Bureau of Human Resources for the performance of its employees, whether working well run each program of work and behave according to the cultural character and discipline in accordance with the behaviour of the corporate culture to improve productivity and performance by applying the principle of reward and punishment for put positions.

This study uses qualitative and ethnographic approach interpretive paradigm through observation and in-depth interviews of the informants in the bureau of human resources to find out the gains in accordance with the characteristics, culture, discipline and motivation of employees working at the University of Widyatama.

**Keyword:** Human Resource Audits, Productivity, Performance, Ethnography, Interpretive study

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## Introduction

Rapid flow of information caused by advances in technology and transportation lead all activities can not stand alone. Likewise with the the former accounting disciplines of science only gives a natural resource and capital alone, is now perceived still lacking because there is still a wealth of companies that have not served the wealth of human resources. Human resource accounting arise due to the failure of accounting principles in providing relevant information to management and investors, where the costs of human resources are treated as an expense (expense) in the event. for an overall company human resources are very valuable wealth. Lost or removals professional human resources for a company is a major disadvantage because it will get rid of the cost incurred by the company to nurture or educate human resources earned it.

According Bhayangkara (2010), human resource audit is a comprehensive assessment and analysis of programs of Human Resources (HR). Walauapun specifically audit was conducted on the HR department, but not limited to any department. Audit of HR includes the study of human resource management function in the organization as a whole, including that carried out by managers and supervisors. HR Audit aims to make an assessment (evaluation) of the various HR activities that occur in the company. The assessment emphasizes human activity whether they are economically, efficiently and effectively in achieving its objectives and provide recommendations for improvements to various shortcomings that still exist. HR audit can be conducted on the entire organization. The results of the audit are known potential corporate HR needs have been met or not and to know the potential of human resources can be developed.

Meanwhile, according Susilo (2002) in Assa Octora (2010) said that human resource audit is a systematic examination and assessment, objective and documented the organizational functions that are affected by human resource management with the goal of compliance with the principle of appropriateness, effectiveness and efficiency in the management of human resources to support the achievement of goals and objectives of the organization functions as a whole is good for short term, medium term and long term.

There are some interesting phenomena that occur in the world of work today, including the increasing number of companies in Indonesia led to the company must be able to maintain a professional work force and productive so as not interested in moving to another company, the phenomenon of the placement of employees who are not in accordance with their educational background. This will hamper efforts to increase productivity, due to lack of employee ability science behind his work.

The company must also pay attention to the level of satisfaction of employees, so that employees can work more productively. Sebagaimana are often heard: productive employees are those who are happy in their work. Prof. Sondra, MPA (1997) in Lintoman Sagala (2009) says there are four things to be an indicator of whether or not the employee is happy: a high level of productivity, a low level of probability, a low level of transfer of personnel and a high level of job satisfaction.

Productivity is influenced by various factors, one of which is important is the quality of its human resources. Many aktivitas, which is the implementation of human resource management, will have an impact in increasing productivity. Starting with the procurement of human resources (recruitment) based on job description to determine the compensation given to the resource maintenance activities mansuia obtained which in the end to be asked whether the management of the work is already working effectively to achieve the objectives of the company; or in other words whether the human resource has been used optimally. Human resource management audit is an examination of management that emphasizes the terms of effectiveness and efficiency. With the implementation of resource management audit, then push the human resources department to be more effective and efficient. In the end, with the good of this division, the productivity of its human resources is expected to increase.

Therefore, the purpose of human resource audit is an assessment of the characteristics penilaian through "skill" employees in the work environment in Widyatama University, Bandung in compliance on both a functional and structural positions according to their ability and background in education have in improving productivity, and performance goals and performance targets in the work environment Widyatama University, Bandung.

Based on the description of the background, the researcher tried to do research on the importance of the role of human resources in the audit environment Widyatama University, Bandung. Human resource audit is intended for



employees in carrying out a position in accordance with the background and job assessment so as to increase productivity and work performance in environments Widyatama University, Bandung.

## **Literature Review**

### *Human Resources Audit*

Human resource audit is a comprehensive assessment and analysis of programs of human resources. Audit of human resources stressed to an assessment (evaluation) of the various activities of human resources in an enterprise to improve productivity and employee job performance is economically viable, efficient and effective in achieving its objectives and provide recommendations for improvements to various deficiencies that occur in the activity human resources are audited for improving the performance in a corporate environment.

Some opinions about the meaning of audit management, including the following:

Willy Susilo (2002: 53) in his book "HR audit" cited by Listoman Sagala (2009), states that:

Management audit is an audit of the management of an organization as a whole to assess whether management elements have been planned, executed and controlled by the principles of good management and the right so that the organization through its functions can achieve the planned objectives that include dimensions PQCDSE - Productivity - Quality - cost - delivery - safety - Morale - environment - effectively and efficiently.

According Agoes (2004) in Assa Octora (2010) stated that the management audit also called operational audits, functional audit and system audit is an examination of the operations of a company, including accounting policies and operational policies are determined by management to determine whether the operations has been done effectively and economically.

Some studies require an audit of the importance of human resources because part of the goal to identify the activities, programs and activities that still require improvement so as to recommendations given future improvements can be achieved over the management of the various programs and activities of the company, but it is also to prevent the possibility of various losses (Bhayangkara, 2010). In addition, some of the main objectives in the audit of human resources, as follows:

#### **Criteria**

Criteria are the standards (guidelines, norms) for each individual / group within the company in their activities.

#### **Cause**

The cause of an action (activity) is conducted by each individual / group within the company. The cause may be positive, the program / activity runs with levels of efficiency and effectiveness of higher or otherwise is negative, the program / activity runs with levels of efficiency and effectiveness is lower than a predetermined standard.

As a result of a comparison between the causes of the criteria related to the cause. Negative result indicates the program / activity running with a lower level of achievement of the defined criteria, where as a positive result indicates that the program / activity has been well established with a higher level of achievement of the specified criteria.

Phenomenon as well as the important role of the audit of human resources (HR) argued against some as implementation considerations as to the purpose of human resource management in the oversight of the work units in an enterprise environment. Some as important points regarding human resource audit, as follows:

- Human resource audit is the examination and assessment activities means is a process of seeking and collecting data and information in a factual, significant and relevant to the decision-making stage based on the results of the verification and assessment of auditors.
- Auditors need the data. The data is the fact that an actual reality or circumstances that exist or can be proven really exist or occur
- The data required by auditors is data that is relevant and significant, meaning that the data that has to do with human resources issues or interests of the company as a whole and be able to explain the problem in a more focused and in-depth
- Audit of human resources is done in a systematic, meaning that the pattern is done with logic and set of management principles. HR audit is planned, evaluated and results are followed up.



- Human resource audit conducted objectively, meaning auditors wherever possible to minimize the element of subjectivity in the examination of interaction not confuse facts with opinions.
- Documented audit activities, meaning that all that is done in the overall audit process from planning the audit, implementation, and reporting of the results followed by audit results must be recorded and the records properly managed so easily found at any time required.
- The output of the activities of human resource audit is the information that is inferred from the data and facts that have been collected and processed to be more informative and contains important information to be given attention and followed up by audit by management.
- Human resource audit is done to determine whether the principle of full conformance, meaning that the audit is directed to determine the degree of compliance with the requirements that must be met in the management of human resources
- Human resource audit carried out to examine the effectiveness and efficiency in the management of human resources means directed in addition to the principles and compliance aspects of goal attainment was also directed to assess the level of efficiency in the management of human resources.
- Audit of human resources is intended to support the achievement of functional goals and objectives of the organization as a whole.

From some points that have been described above concluded that the importance of the audit conducted human resources within the company as an examination and assessment of the overall quality of human resource management activities that aim to assess the effectiveness, efficiency and appropriateness in the management of human resources in support of achievement of corporate goals and objectives.

#### *The Purpose Of Human Resource Audit*

The audit of human resources is a goal-oriented activity whose purpose is to seek the benefits themselves. The purpose of the audit of human resources is to help solve the problems faced by the company in the perspective of human resources to ensure the achievement of organizational goals and overall functional both for today and for the future to come.

The purpose of the audit of human resources, according to Malay SP Hasibuan in his book "Human Resource Management" cited by Lintoman Sagala (2009), as follows:

- To determine whether the results of the employee and in accordance with the plan
- To determine whether all employees can complete the job-description, with good and timely
- As a guideline to determine the amount of remuneration of each employee
- As of praise and giving consideration to any employee or legal
- As a basic consideration of the implementation of verbal mutation, horizontal and or over the job for employees
- To motivate an increase in morale, work performance and employee discipline
- To avoid errors as early as possible and corrective action can be performed as soon as possible
- As a basic consideration of the participation of employees, perhaps development (training and education)
- To satisfy the ego and job satisfaction with regard to the value of their
- For guidance in implementing effective recruitment selection in future
- As a basic reappraisal of the HR plan if it's good or not or still refined.

#### *Utilization and Assessment of Human Resource Audit*

Audit of human resources is an operational audit activity undertaken by a person or group in the unit of work in an independent company as an indicator to evaluate or measure the performance of the employees in the company in accordance with predetermined criteria. Some of the benefits of human resource audit is a reference to the implementation and improvement of the work on the human resources in the company and make regulations to change the rules in order to enhance employee performance and professionalism in human resource units, according to William W. Werther in Bhayangkara (2010) cited by Assa Octora (2010), are:

- Identify the contribution of the HR department of the organization
- Increase the professional image of the HR department
- Encourage responsibility and professionalism are higher in employees
- Clarify the duties and responsibilities of the HR department





- Encouraging the diversity policies and practices of HR
- Finding the critical issues in the field of HR
- Ensure compliance with laws and regulations in HR practices
- Reduce HR costs through more effective HR procedures
- Increase the desire for change in the HR department
- Give careful evaluation of the human resources information system.

As for some of the benefits of the implementation of human resource audits for any company or employees at the company as a reference for the application of the value increase productivity and work efficiently within the company itself. Human resource audit itself intended to improve survival for companies in the selection and recruitment of new employees as well as in the appointment of competent employees who hold a position in both functional and structural in the company in order to achieve a policy in the direction of the company.

Some of the benefits of the audit of human resources for both employers and employees, can be explained in the following description by Willo Susilo in his book "HR audit" cited by Lintoman Sagala (2009):

**Benefits auditing human resources for employees**

Audit of human resources is a reference as a step in the policy making, make improvements on the results of the work of the employees and as a basis for making any decisions in the form of improved performance on enterprise performance obtained by the employee for the benefit of the services and promotions

**Benefits of human resource audit for companies**

Audit of human resources is very important for the company as the base material as decision-making, make repairs; improve the efficiency and effectiveness of organizational functions in detail.

*Implementation of Human Resources Audit function*

The audit of human resources is a must thing to know about the performance of the functions of human resources to the utilization of the scope and performance monitoring activities and program of work of employees in the human resources and corporate environments.

Implementation of the "function" of human resource audit itself is performed directly by the employer (Bureau Chief), Head of Department and the Head of Section in the human resources unit itself as well as in a corporate environment. In his book Willy Susilo 2012 "HR Audit", found that auditing human resources there are 4 parts, as follows:

- Conducted by the company's internal audit auditors formally been established in a company to perform an audit of human resources in a planned manner throughout the organization functions well on the function of human resources (HR) as well as the function of other units (non-HR)
- Audit also performed at the bureau chief or head of human resources appointed to audit the HR section of the Self Assessment approach.
- Audits conducted by the agency head or the head of the human resources functions of the other units (non-HR)
- Audit conducted by experts from the corporate human resources management from outside the company with the approval of the leadership of the company.

Activity and objective audit of human resource is intended for all organizational units of the company to find out how much productivity, employee performance, discipline, and morale and employee behavior on company work.

In the implementation of human resource audit is part of the examination process to be done and be objective about the outcome of the audit report. According to Willy Susilo (2002: 144) in his book entitled "HR Audit", as follows:

- Observing the activities
- Ask for explanations or asking
- Ask for a demonstration
- Reviewing documents
- Checking the checker list



- Finding the evidence
- Checking cross
- Interview Audit
- Conduct a survey with questionnaires
- Complementing information from outside sources
- Assessing the data and facts (analyze)
- Concluded

## **Methodology**

### *Introduction to Research Paradigm*

A study should choose the method that will be used, the selection of this method is for researchers to be more aware of the meaning in a study, it is intended that the researchers actually have a solid grounding in the study. Moreover, in the selection of appropriate research methods will affect the quality of the knowledge to be generated. This study is a part that will be presented on the research methods used in finding an answer of what to expect on the purpose of the audit of human resources at the University Widyatama, Bandung.

### *Paradigm Approach: Characteristics in Determining Options*

Paradigm is a way to use one's perspective in view, assess and interpret something. By using a different spectacle frames, then the results will also be different thoughts (Fanny, 2010: 2). The paradigm includes a belief, perspective or framework that guides research in the field. Chalmers in Willis (2007: 8) defines a paradigm as follows:

*"Made up of the general theoretical assumptions and laws, and techniques for their application that the members of a particular scientific community adopt"*

Burrell and Morgan (1972: 22), through sociological paradigms and organizational analysis perspective grouped into four research paradigms, that is functional paradigm, the interpretive paradigm, radical humanist and radical structuralist paradigm. Chua (1986) in his *Radical Development In Accounting Thought* simplify this paradigm into the mainstream of the three paradigms (functionalist or positivist), the interpretive perspective and critical perspective. And then Sarantakos in Triuwono (2006: 213) adds another paradigm over Chua proposed paradigm so that it becomes four, namely the positivist paradigm, the interpretive paradigm, critical paradigm, and postmodernism.

The paradigm of positivism or better known as Mainstream emphasizes self on (practice) accounting as it is (as it is). In this context, accounting theory is understood as a tool to explain and predicted accounting practices. His skill in explaining and predicting something of value makes it sterile culture, politics and even religion are so demanding that the objectives of the free value so that it can be displayed as a prediction or legal enforceability of free time and a place (Triuwono, 2006: 215; Muhadjir, 2000: 4).

Criticism paradigm emphasizes liberation and change. The purpose of the theory in this paradigm is liberating (to emancipate) and make changes (to transform). This paradigm assumes that a theory is not enough simply to interpret, but also (most importantly) to be able to liberate and transform. Without the element of "liberation" and "change", a theory will never be referred to as critical theory. Triuwono, 2006: 218). In fact, Smith (1993) referred to by Willis (2007: 87) adds that the interpretation of data from a critical perspective or make transparent over false consciousness and ideological distortion.

Paradigm is born as the antithesis of postmodernism positivistic modernization. This paradigm tries to understand reality more fully and complete (comprehensive) with an unstructured approach that always, no shape, no formal and not absolute. Not surprisingly, this paradigm often marries the ideas of different or even contradictory (Triuwono, 2006: 219).

Another grouping is carried out by the researchers of the paradigm is quantitative and qualitative terms. The term is popular used two different worldview or paradigm for research. However, it emphasizes to the data than the basic beliefs and assumptions (Willis, 2007: 8), resulting in a deep understanding of this dichotomy is not appropriate (Sukaharsono, 2006: 230).



Qualitative research conducted in the state of nature and nature discovery. In qualitative research, the researcher is the key instrument. Therefore, the researcher must have a stock of theory and extensive knowledge so could ask, analyze and construct the object under study becomes more apparent. This study emphasizes the significance and value bound. This research is hidden, to understand social interaction, to develop theory, to ensure the correctness of data and researching the history of the development.

The method used in this study is to reveal the importance of the implementation of Audit Human Resources (HR) at the company, especially educational institutions (University) to determine the productivity and performance of staff in the human resources unit or the other units within the University Widyatama is a research method qualitative. Selection of a qualitative research method is to provide a new perspective on the election on the basis of the audit of human resources in the company to assess and see immediate productivity and performance as well as the fulfillment of "mutation" structural and functional officials, whether their position is currently able to increase productivity and performance to match their educational background. This is in line with that proposed by Meleong (2007: 6) that qualitative research is research that is intended to understand the phenomenon of what is experienced by the subjects (eg, behavior, perception, motivation and action) in a holistic manner and by way of description in the form of words words and language in a particular context that naturally and by utilizing a variety of scientific methods. So also expressed by Myers (2009: 5) that qualitative research is designed to help understand people and what they declare and do, so it can be in understanding the socio-cultural context in greater depth where the person lives.

A qualitative approach is an understanding of the research process and is based on a methodology which investigates social phenomena and human problems. In this new approach, created a complex picture, studying words, a detailed report of the views of respondents and conduct a study on the situation experienced (Creswell, 1998: 15). Bagdan and Taylor (Moleong, 2007: 4) suggests that qualitative methodology is a standard research procedure that produces descriptive data in the form of words written and spoken from the people and observed behavior.

This study was conducted to understand the importance of the audit of human resources in improving productivity and performance in environments Widyatama University, Bandung. It aims to look at the extent to which the ability of the employees in the unit on the roles of both the HR and the other units in the human resources environment. Work culture environment is an election to achieve the motivation and ability to work in an environment officials Widyatama University, Bandung. Work ability in improving the productivity and work performance will contribute to the employees in the "defend" his position or promotion to other positions as well as to account for the details of each program both financially and non-financially in the position to which it aspires both organizations and individuals. In this study intended to look at the cultural and social aspects of accounting work ethic which has a side of the sphere.

This study uses an interpretive paradigm. Interpretivism paradigm as proposed emphasis on the meaning or interpretation of a symbol for a person to understand the reality of the world as it is. An understanding of the fundamental nature of the social world at the level of subjective experience (Ludigdo, 2007: 52). By using the interpretive paradigm can find meaning and purpose of the audit of HR in improving the productivity and performance of employees in each work unit in accordance with the work culture, discipline and motivation, whether it has been carrying out a program of work in accordance with the target and whether the job matches the background behind education.

*Ethnography: Options in Determining Value and Meaning.*

*Ethnography: Characteristic and Meaning*

Ethnography is a branch of anthropology that focuses in the field of social learning and culture of a society. Basically ethnography is an understanding of the science that describes the way of life and culture (environment) that are abstract and experiences, beliefs, norms and value systems study group (Spradley, 1997: xviii: Sukaharsono, 2009: 91: Mulyana, 2001: 161 in Selmita, 2011: 17). In this study, refers to the understanding and improvement of productivity and job performance by increasing employee mindset work culture, and traditions of the University Widyatama, Bandung.



This ethnographic research itself is an approach to research method that aims to examine an object that is associated with the culture of a community or a social community with a way to describe the way they think, live, work motivation, work discipline and behave well and as it should (Myers, 2009: 92; Muhadjir, 2007: 147 in Selmita, 2011: 17). According to Spradley (1997: 3) in Selmita, 2011: 17), ethnography is the work of describing a culture in which the main objective is to understand a way of life (organizational) from the point of view of the original (read: those with long service in the organization concerned) (Sukaharsono, 2009: 11; Selmita, 2011: 18).

Ethnographic research can also be used in exploring and describing the accounting life in the midst of social interaction. Ethnographic research is not only to observe human behavior but also to make sense of the behavior that can be framed in the life sciences accounting (Sukaharsono, 2009: 92; Selmita., 2011: 18).

Ethnography itself is a description of the culture in a society that is derived from a relationship that lasts a long time, so that an ethnographer is not enough to just do interviews with informants, but more important is the observation while participating in community life itself (Riemer, 2008; Randa, , 2011: 25; Magnum, 2011). Ethnographer actively participates into the study group and will focus on the meaning of behavior, language and social interaction within the group (Sukaharsono, 2006: 237).

Qualitative ethnographic research methods aimed to uncover the various characteristics of the work culture in the improvement of productivity and employees' performance in an environment Widyatama University, Bandung. Some of the objectives of ethnographic research by Spradley (1997: 12-20) in (Selmita, 2011: 19), namely: First, to understand human clump. In this case, ethnography role in informing theories of cultural ties, offering a good strategy to find a grounded theory, as well as to understand the surrounding environment is a complex society and understand human behavior. In the context of this research is to understand how the expertise of the personnel in both structural and functional employees can execute and implement productivity and job performance in accordance with the work program and its targets and can follow the "rhythm" in the culture of the work environment Widyatama University, Bandung. Second, ethnography is intended to serve humans. Conceptually it's own ethnographic research aims to understand and meet the needs of the man himself. In the context of this ethnographic study of how an employee is aimed both structurally and functionally it can serve the needs of employees, faculty and students as they relate to productivity and job performance for the employees themselves.

In this study, using ethnographic due to various reasons: First, research conducted aims to determine the meaning of Audit Human Resources (HR) for employees in the Bureau of Human Resources as well as in environmental units Widyatama University. Audit of Human Resources at designated positions as the performance evaluation of both structural and functional in the language, behave, cultured in accordance with the performance work culture environment Widyatama University, Bandung. Increased productivity and job performance is a system that must be implemented by officials of both structural and functional within a ministry and serve the surrounding environment (read: community, students and faculty) to the achievement of any work program and produce an evaluation in the work unit and staff part. Second, understand the duties and functions in accordance with the work culture at the University Widyatama. Employees who work in the environment of University Widyatama should understand about the work environment, carry out the functions and responsibilities, and implement capable of carrying out targeted work is expected to be completed by the work unit.

Second, understand the duties and functions in accordance with the work culture at the University Widyatama. Employees who work in the environment of University Widyatama should understand about the work environment, carry out the functions and responsibilities, and implement capable of carrying out targeted work is expected to be completed by the work unit. To dig deeper on informants to interpret the situation so that appropriate methods are interviews and participation. Ethnography focuses on participating observation, so that it will support the empirical approach life becomes the object in this research. In addition, the ethnographic focus on self-understanding, life experiences and everyday social interactions of the members. Collecting data in this way will dig all the problems of everyday life in the form of an open conversational interview. In the disclosure contained in the uniqueness of individuals, groups, or organizations and the community as a whole needs to be done, detailed, and can be accounted for in order to illustrate that there is meaning behind the reality. Third, by using the concept of cultural ethnography as a social structure, kinship, political structures and social relations between members of the group or function can be explained.



*Ethnography: Assessment of Productivity and Employee Job Performance.*

An ethnographer conducts an interview with an informant to get answers from the audit of the employee (structural and functional). As appropriate human resource audit is required as evaluation at all levels of management to determine the work program carried out by staff at the Bureau of human resources bureau organized also at the level of the rector, foundations, faculty and other lecturers in developing produktivitas and achievements work in accordance with the culture in the work environment Widyatama University Bandung has been done so far.

In the implementation of this interview an ethnographer "uncover" as well as providing advice and criticism of the performance of the faculty and staff in the work environment Widyatama University, Bandung whether employees (*structural and functional*) has been improving productivity and performance in accordance with the existing work culture at the Widyatama University, Bandung. Following structured interviews were conducted with informants ethnographer:

*Environment Bereau of Human Resources*

*Etnografer :*

In the implementation of improved productivity and work performance of employees in the Bureau of Human Resources that the number of employees at eight (8) people are already as much as possible the performance of the employees as much as they did with the eight (8) people and the environment is mostly done a good job to do inputting payroll system (attendance), the validity of faculty performance, appointments / mutation officials structural and functional as well as various other jobs?

*Informan:*

The orientation of the Bureau of Human Resources work to date is "administrative" while the "development" still needs a lot of adjustments in the form of policies / procedures / SOPs, systems, and human resource readiness. If we've been able to do "development", the Bureau of Human Resources should be renamed the HRD (Human Resource Development). Since the Bureau of Human Resources is an administrative nature so that the number 8 is still in it's employees can cope with the processes or activities within the Bureau of both the quantity and quality of human resources in the form of competence of each employee. But if it is related to the development, the quantity and employee competence (*education, hardskills, softcopy*) in the Bureau of Human Resources still not be sufficient.

*Etnografer:*

*Implementation of environmental performance in the bureau of human resources in the assessment seen by the informants themselves, each employee has a professional responsibility for the performance they are doing and punctuality in accordance with the targets and achievements of the work they are doing as well as whether there is a direct assessment in the form of a reprimand or orally to employees who do not fit the job-description and job targets that can not be resolved by the employee in the human resources environment itself.*

*Informan:*

Currently our institution has had a good performance assessment system procedures and guidelines for faculty and non-faculty employees who have been well documented. Then the performance targets were continuously monitored on a quarterly basis by the competent authority for each unit of work that exist within the institution in the form of Action Plan which generally describes the achievements of the working conditions and targets that have been set previously. If there is a target that is not the right time to do or were not achieved, inventoried by each work unit then conducted follow-up monitoring under competent authority and leadership of the University. However, for long-term development in the improvement of the quality of the performance, now the institution has planned for the manufacture of Key Performance Indicators are based Balanced Score Card. So expect the performance assessment system, the target, increasing performance and achievement.

Performance assessment System is currently ongoing improvement to be more system fairness. Powered by developing database systems and applications for administrative implementation, to accommodate a variety of input and suggestions from stakeholders.

*Etnografer:*





*Regarding workmanship throughout 1 year work program, every employee in the Bureau of Human Resources making one makes the program works and should be done and have the responsibility of each of the employee (self-assessment). Each employee has their own abilities in the work program, the budget, the operation of computers and job-description, according to the educational background of each employee especially in the field of accounting records (the calculation of the amount of funds diperlukan by the bureau of human resources / expenditure spending for 1 years.*

Informan:

Based on the information that has been given earlier that our institutions have created programs based work based on job description of each employee, then the targets that must be achieved. All this is summarized in the Action Plan as well as the cost is allocated to the budget plan which is then reported to the authorities and has been well documented. Then also in the Bureau of Human Resources Annual Report each year to make the program work superbly done during the year to be the basis for determining the strategic objectives in the following year.

*Assessment of Employees on Environmental Widyatama University, Bandung.*

Etnografer:

*Bureau of Human Resources, in the recruitment of new faculty are in accordance with the needs of the faculties at the Widyatama University Bandung, shows according to the educational background which is owned as well as provide working engagement in the achievement of the assessment parameters lecturer in supporting productivity and employment assessment in accordance with the character and culture of the Widyatama University, Bandung.*

Informan:

The recruitment process at our institution based on the policy of the Strategic Plan as stipulated in the Development Program, so that there is a plan prior to recruitment.

Bureau of Human Resources as administrators, support services and perform the preparation of bureau strategic objectives and performance indicators are based on the Bureau of the University Strategic Plan, the achievement of goals and changing conditions of the previous year as a guide to the implementation of human resource planning needs.

Planning human resource requirements in accordance with policies geared to educators normative ratio of the number of students at the Widyatama University, Bandung (UTama) as well as the workload educators established by the DIKTI. Efforts made in achieving the normative ratio is by recruiting educators continuously (continuous recruitment) policy based Development Program.

Recruitment and selection process has been well documented that characterized by the recruitment and selection procedures for both faculty and non-faculty employees. Recruitment and selection of employees lecturers conducted by the Bureau of Human Resources, but for non-faculty employees conducted by the Foundation.

Special attention to the implementation of faculty recruitment and follow the requirements of Government Regulation No. 84 In 2013 "About Appointment Non Lecturer In Civil Servants and State University Lecturer In Private Colleges" Article 5, among others:

- General requirements, including:
  - Highest age 50 years;
  - Devoted to God Almighty;
  - Loyal to the Pancasila as the State, the Constitution of the Republic of Indonesia Year 1945, and the Republic of Indonesia;
  - Never been convicted of a criminal offense by a court decision that has had a permanent legal force;
  - Healthy physical, spiritual, and can perform duties as a lecturer; and
  - PNS are not bound as a lecturer / lecturer on non-civil other universities and / or as a permanent employee at another institution.
- Specific requirements, including:





- Have a minimum academic qualification of a master's or equivalent graduate programs in the fields of science and technology in areas of assignment;
  - Pass the selection organized by the college and / or Administering Agency PTS.
- Age requirement referred to in paragraph (2) letter a, can be excluded for lecturers who have special expertise or extraordinary competence;

Referring to the above Government Regulations, institutions internally we have additional requirements set out in the well-documented power of Educational Procurement Procedures enacted in 2013, includes:

- Minimum education Master (S2) to the appropriate field of science;
- The educational qualification of teachers preferred candidate must be linear between S1, S2 and S3);
- Accreditation educational institution where the candidate completed his studies educators must be at least B;
- GPA prospective educators both S1 and S2 (and S3) must have a GPA of at least 3.00;
- Have TOEFL score  $\geq 525$ ;
- Maximum age 35 years for prospective educators who have educational S2 (master) and a maximum age of 45 years for prospective educators who have education S3 (Doctorate);
- Preferably have experience in teaching and has had academic positions.

Implementation of the selection of lecturers conducted by the Bureau of Human Resources is well documented with reference to the Educational Personnel Procurement Procedures, consists of 3 types of selection are:

- Implementation of administrative selection associated with verification of applicant data regarding the completion of administrative requirements.
- The selection of desk evaluation refers to the linearization of science and experience of applicants.
- The selection interviews conducted to explore the competence and experience of the applicant as well as tailored to the needs of formation in each study program.

Appointment of lecturers refers Workers Educational Procurement procedures are well documented. Lecturers, who have successfully recruited, appointed as educators continue with the evaluation (2 years). For placement positions specified in the Decree of the Rector well in academic or administrative functions.

Lecturers are placed in academic functions shall meet the performance as the basis for evaluation within two (2) years from the date of appointment to be able to maintain the continuity of the status of permanent educators, among others:

- Equalization or increased levels of Functional;
- Publication of scientific papers at least 1 (one) in one (1) academic year, either in the form of journal Accredited National / International Journals or presented at the National Seminar / International;
- Presentation of papers in Internal Seminar at least 1 (one) in one (1) academic year;
- Increasing the minimum standard conversion EPT score of TOEFL 525;
- Active participation in the development programs of the institution;
- Improved S3 education through scholarship sources outside the University Widyatama;
- daily tasks within the scope of Tri Dharma University.

#### *Etnografer:*

*In the implementation of improved performance and productivity of employees, the bureau of human resources is always an evaluation, motivation, education and training as well as warning against its employees working in the cultural environment Widyatama University, Bandung.*

#### *Informan:*

Assessment of performance both for faculty and non faculty each have their implementation procedures, respectively, but the performance assessment is intended to improve the quality of service, productivity of labor and the development of institutions that can play a more optimal and to meet the requirements for the class promotion, salary increase periodically, contract extension, an increase in the environmental status of our institution.



Development efforts both for quality and competence for faculty and non-faculty, the Foundation provides funding in the form of additional facilities or the bailout for further studies abroad according to the requirements specified, in addition to training facilities / workshops with the cost Widyatama Foundation. It is stated in the RKA (Budget Activity Plan) Annual well-documented. The training program includes:

- Internal Training conducted through in-house managed by the Bureau of Human Resources. The training material covers the competencies required by the Faculty / Bureau / Center with reference to the needs of learning and performance and working environment in each unit.
- External Training is conducted through public training is training that refers to the need for improving the quality of academic competence / non-academic or performance requirements and learning and working environment in the scope of the Faculty / Bureau / Center.

To enforce the discipline of the faculty and non-faculty employees within our institutions in carrying out their duties by applying rules on discipline and sanctions as outlined in the Guidelines and Code of Ethics Lecturer and also listed on the Personnel Rules that must be obeyed by all the employees for.

*Etnografer:*

*assessment and placement of employees who have the competence and educational background in a good position to carry out a structural and functional environment Widyatama University is in conformity with the skills and eligibility to perform this inside. Bureau of human resources is always to evaluate the performance of the officials at the University Widyatama to see each program of work, productivity and job performance of employees.*

*Informan:*

The process of placement for several positions in our institutions is planned based on the policy of the Strategic Plan as stipulated in the Development Program. Each of the qualifications required for each position have been listed in the Civil Service rules that must be obeyed by the environment of our institutions. Later in the selection procedure was already well-documented in the Board Meeting Positions on mechanism listed in the post election procedures.

Then evaluate the performance of the officials was based on a performance assessment system for officials. Performance Assesment System is currently ongoing improvement to be more system fairness. Powered by developing database systems and applications for administrative implementation, to accommodate a variety of input and suggestions from stakeholders.

## **Findings and Discussion**

Human resource audit is a comprehensive assessment and analysis of programs of human resources. Audit of human resources stressed to an assessment (*evaluation*) of the various activities of human resources in an enterprise to improve productivity and employee job performance is economically viable, efficient and effective in achieving its objectives and provide recommendations for improvements to various deficiencies that occur in the activity human resources are audited for improving the performance in a corporate environment.

The purpose of implementation of human resource audit is an activity controlling the emergency operational audit performed by a person or group in the unit of work in an independent company as an indicator to evaluate or measure the performance of the employees in the company in accordance with predetermined criteria. Some of the benefits of human resource audit is a reference to the implementation and improvement of the work on the human resources in the company and make regulations to change the rules in order to enhance employee performance and professionalism in human resource unit.

Evaluation in increased productivity and employee job performance has been relatively college Widyatama Unviersity going well. It is seen from the results of several interviews between ethnographers and informants. The audit of human resources at the University of Widyatama conducted by the bureau of human resources in performing the functions of human resource planning, selection and orientation, training and development, employee career planning and development, performance appraisal of human resources has been relatively very good fit with the culture work at the University Widyatama, bandung.



Assessment conducted by the bureau of human resources is also a form of consistency bureau of human resources in the improvement of productivity and work performance in accordance with existing regulations in University Widyatama, Bandung as well as regulations that have been set by the Higher Education in the recruitment of prospective employees in particular for the implementation of faculty recruitment and non-faculty attention and follow the requirements of Government Regulation No. 84 In 2013 "About Appointment Non Lecturer In Civil Servants and State University Lecturer In Private Colleges" Article 5 as well as through rules that have been determined by the foundation and the Widyatama University, Bandung in the development of productivity and performance for faculty and non-faculty employees with reference to the Tri Dharma University and understand work culture in Widyatama University, Bandung has implemented. There is still a lack of awareness of the level of faculty and non-faculty employees in the functions of running each referring to Tri dharma so that the bureau of human resources and provide a warning of sanctions against its employees in order to be implemented properly in accordance with applicable regulations and in accordance with application of culture on Widyatama University, Bandung.

The researcher realize there are flaws in the bureau of human resources in improving the productivity and performance by the number of staff and the quality of the employees in the bureau of human resources still need to increase the performance and the need for adjustments in the understanding of the basic policies / procedural / SOP and system in the development of human resources so that future Bureau of Human Resources can increase its capabilities in the quantity and quality (education, hardskills, soft skill) will be renamed HR (human Resources Development).

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## **Business Opportunities For Fishermen In Selected Barangay In Malolos Coastal Areas Through Economic Sustainability**

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### **Abstract**

The abundance of marine life and rich aquatic resources are some of the reasons why people in coastal areas particularly in the City of Malolos are engaged in fish catching as the main source of their income. However, as time went on, many things affect the fishing industry such as water pollution, over fishing, muro-ami fishing techniques, increased in the number of fish pond, fishery resources destruction (dynamite fishing), habitat loss (mangrove conservation)etc. these situations of Marine life really affects the economic condition of the fishermen and led to poverty and its effects is the fishermen tend to seek for other business opportunities. In line with this, this study focused on assessing the skills and training of fishermen and their relatives that would help them find sustainable business opportunities.

The subject of this study involved 100 randomly selected fishermen and their relatives in three-selected barangay such as barangay Caliligawan, Masile and Namayan in the City of Malolos coastal areas. In order to gather data the researcher used descriptive and qualitative techniques. The instrument used in the study was developed by the researcher and validated by the experts in the field. The data gathered were tabulated and treated using frequency, percentage mean and ranking.

The analysis revealed the following: The total number of sari-sari store in three selected barangays varies through the total number of population; Most of the respondents in coastal areas are of legal age and capable of handling business; Most of the respondents in coastal areas are willing to have trainings such as automotive and merchandising for their business opportunities; Most of the respondent in coastal areas are married the reason why they are willing to have trainings to have business opportunities that may help them to prepare the future of their children; Among the three selected barangay in coastal areas barangay Masile have the highest educational attainment while the respondents in other two barangays are mostly in elementary level; Most of the respondents belong to "Samahang Kababaihan" in coastal areas; Most of the respondents are resourceful to look for their financial resources; Some of the respondents have no formal trainings from Local Government and NGO and most of them gained their knowledge by observing and through media particularly the television; lastly most of the respondents in coastal areas are not aware that some of the resources and materials around them can be used as business opportunities. The output of this research is highly recommended for the Extension Service of the different Colleges of the Bulacan State University.

**Keywords:** sustainability, coastal area, business opportunities

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## **Introduction**

Very rich aquatic resources surround the Philippines. According to National Statistic office as cited by Naguit (1997) the Philippines is an archipelagic country of more than 7,100 island, boast and rightly so of rich fishery resources. The abundance of the marine life and rich aquatic resources are some of the reasons why people especially residents in coastal areas particularly the Malolos Coastal Areas are engaged in fish catching as the main sources of their income. However, as time went on, many things affect the fishing industry. A number of factors contributed to the low production: encroachment of commercial fishermen into shallow waters, destruction of the marine environment, over-fishing, and an increasing number of fishponds. A large proportion of the mangrove forests were cleared to construct fishponds, seriously damaging the coastal ecological system. Coral sustained serious damage from illegal fishing with dynamite and cyanide, and from the muro-ami fishing technique by which young swimmers pound the coral with rocks attached to ropes to drive the fish into nets. Silting from erosion caused by deforestation also damaged coral, and inland freshwater lakes were polluted from industrial and agricultural wastes (Mangobay.com, 1991). This situation of marine life really affects the economic condition of the fishermen and led them to poverty problem. This poverty problem also affects the people in coastal areas; the fishermen tend to seek for other opportunities in able to survive. As one of the native resident in coastal areas, the researcher would like to help these fishermen through assessing skills and trainings of the fishermen that will help them find opportunities that will guide them into other business through economic sustainability. As Lucas (2014) quoted: "Everybody has talent and it's just a matter of moving around until you've discovered what it is. A talent is a combination of something you love a great deal and something you can lose yourself in -- something that you can start at 9 o'clock, look up from your work and it's 10 o'clock at night -- and also something that you have a talent, not a talent for, but skills that you have a natural ability to do very well. And usually those two things go together". The statement above only shows that all men have talents and skills. These talents and skills plus proper trainings and capital are advantages for business opportunity for some people or probably the fishermen living in Malolos coastal areas therefore, skills and training are some of the ways for a sustainable business.

This research also aims to assess sustainable business opportunities for fishermen in three-selected barangay in Malolos coastal areas.

## **Statement of the Problem**

The general problem of the study is: How may the other sustainable business opportunities for fishermen in selected barangays in Malolos Coastal Areas be assessed?

Specifically, the study sought answers to the following questions:

1. What are the demographic characteristics of the barangays?
2. How may the profile of the respondents be described in terms of:
  - 2.1 age;
  - 2.2 gender;
  - 2.3 civil status;
  - 2.4 educational attainment;
  - 2.5 number of children;
  - 2.6 income;
  - 2.7 affiliated association; and
  - 2.8 religion?
3. What is the existing status of the fishermen in terms of:
  - 3.1 financial resources;
  - 3.2 skills;
  - 3.3 training/ workshop attended; and
  - 3.4 business opportunities within the barangay?
4. What are the reasons why the fishermen cannot use their skills and trainings being offered by the Local government units (LGU) and Non-Government Organizations (NGO)?
5. What are the skills and trainings programs to be proposed in order to help fishermen in the City of Malolos coastal areas to have business opportunities?





## Methods and Techniques of the Study

The qualitative and descriptive methods of research were used in this study. According to Sanchez (1998) descriptive research as the general procedure employed in studies have for chief purpose the description of phenomena in contrast to ascertaining what caused them and what their value and significance are. Rajeev (2011) Qualitative research helps to gain insight into people's behavior, value systems, motivations culture lifestyles and how these attributes have a role to play in decision and policy making communicating, conducting qualitative research.

## Results and Discussion

### Demographic Status of Selected Barangay

Table 1. Demographic Characteristics of the selected barangay in Malolos Coastal Areas

Demographic Characteristics	Name of the Baranagay		
	Caliligawan	Masile	Namayan
Number of Population	556	884	872
Number of Houses	125	194	250
Number of Families	198	220	225
Number of Fishermen	28	110	120
Number of School	1	1	1
Number of health Center	1	1	1
Number of Store	5	18	14

It shows that the total number of sari-sari store in three selected barangays varies according to the total number of population and proves that the more number of populations the more number of sari-sari stores the barangay will have.

### Profile of the Respondents

Table 2. Frequency Percentage distribution of the Age of the Respondents

Age	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
11-20	0		5	11	7	15
21-30	0		11	26	7	15
31-40	2	18	9	21	5	11
41-50	6	54	12	28	12	26
51-60	2	18	2	5	11	24
61-above	1	10	4	9	4	9
Total	11	100	43	100	46	100

This shows that most of the people stayed in three selected barangay are from ages 41-50 meaning most of the people in selected barangays are capable to handle a business since they are of legal age.

Table 3. Frequency Percentage distribution of the Gender of the Respondents

Gender	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
Male	8	70	17	40	24	52
Female	3	30	26	60	22	48
Total	11	100	43	100	46	100

The table 3 also shows that in barangay Caliligawan most of the respondents are Male. While most of the respondents of Barangay Masile are female but still this barangay also proposed automotive training as other business opportunities? While in the case of Barangay Namayan most of the respondents are male.



Table 4 Frequency Percentage distribution of the Civil Status of the Respondents

Civil Status	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
Single	0	0	12	28	10	22
Married	11	100	30	70	35	76
Separated	0	0	1	2	0	0
Widow	0	0	0	0	1	2
Total	11	100	43	100	46	100

The table shows that most of the respondents stayed in coastal areas are married therefore the respondents are more willing to learn trainings to have business opportunities because according to the respondents most of them send their children to school to have a brighter future.

Table 5. Frequency Percentage distribution of the Educational Attainment of the Respondents

Educational attainment	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
Elementary	9	80	12	28	29	63
Secondary	1	10	11	25	15	33
Tertiary	1	10	20	47	2	4
Total	11	100	43	100	46	100

This shows that among the three barangays most of the respondents in barangay Masile have the highest educational attainment. It may be the reason why respondents in barangay Masile have higher income compared with the two barangays as shown in Table 7.

Table 6. Frequency Percentage distribution of the Numbers of the Children of the Respondents

Numbers of the Children	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
2 and below	3	27	29	67	21	46
Above 2-4	6	55	14	33	14	30
Above 4-6	2	18	0	0	9	20
Above 6-8	0		0	0	0	0
Above 8	0		0	0	2	4
Total	11	100	43	100	46	100

This shows that the respondents in selected three barangays are aware of family planning and maybe it is their decision to have a smaller family because of the limited resources that they have.

Table 7. Frequency Percentage distribution of the Income of the Respondents

Monthly Income	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
3,000 below	3	27	16	37	26	57
Above 3,000-6,000	6	55	15	35	19	41
Above 6,000-9,000	1	9	3	7	1	2
Above 9,000-12,000			1	2	0	
Above 12,000-15,000					0	
Above 15,000	1	9	8	19	0	
Total	11	100	43	100	46	100

Table 7 reflects that among the three barangays, the barangay Masile has the biggest portion of respondents that the monthly income belongs to above Php 15,000. In contrary, to barangay Masile the barangay Caliligawan and Namayan which most of the respondents have monthly income of Php 3,000 below.



**Table 8. Frequency Percentage distribution of the Affiliated Association of the Respondents**

Affiliated Association	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
Samahang Kabataan			3	7	6	12
Samahang Katandaan	1	7	10	22	10	20
Samahang Kababaihan	1	7	21	47	14	27
Samahang Kalalakihan			5	11	8	16
Samahang Mangingisda	7	46	5	11	10	20
Others	6	40	1	2	3	5
Total	15	100	45	100	51	100

Table 8 shows that most of the respondents in Barangay Caliligawan belong to Samahang Mangingisda. In Barangay Masile, most of the respondents belong to Samahang Kababaihan. Lastly, the respondents in Barangay Namayan belong to Samahang Kababaihan.

**Table 9. Frequency Percentage distribution of the Religion of the Respondents**

Religion	Caliligawan		Masile		Namayan	
	F	%	F	%	F	%
Catholic	11	100	43	100	46	100

This table shows that 100% of the respondents of the three selected barangays are Catholic. This shows that the respondents are able to manage any kind of business. It may be because Catholic religion does not have restrictions on how to handle any kind of businesses.

**Table 10. Frequency Percentage distribution of the Financial Resources of the Respondents**

Financial resources	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
From LGU	6	55	1	24	54	1	10	22	2
From NGO				1	2	3.5	1	2	
From Cooperative and other Financial Institution	1	9	3	1	2	3.5	7	15	3
Others	4	36	2	19	42	2	28	61	1
Total	11	100		45	100		46	100	

This only shows that among three selected barangays Namayan has the ability to stand-alone that only signifies the respondents are also resourceful one of a good characteristic of an entrepreneur for the success of a business.

**Table 11. Frequency and Percentage Distribution of the Skills of the Respondents**

Skills	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
None	1	8	3.5	1	2		3	6	
Selling	5	38	2	26	46	1	19	35	1
Massage	0			1	2		4	7	3
Driving	6	46	1	10	17	2	17	31	2
Beauty-culture	0			2	3		3	6	
Sewing	1	8	3.5	5	9		3	6	
Automotive	0			9	16	3	3	6	
Plumbing	0			1	2		0		
Others	0			2	3		2	4	
Total	13	100		57	100		54	100	



The result of the study shows that most of the respondents in three barangays chose selling as their skills which is one of the best business opportunities.

Table 12. Frequency Percentage Distribution of the Training/ Workshop Attended by the Respondents

Training/ workshop attended	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
None	4	31	1.5	8	14	3	6	10	3.5
Merchandising	3	24	2	19	32	1	16	26	2
Cooking	4	31	1.5	15	26	2	19	31	1
Sewing	1	7	3.5	5	9		5	8	
Automotive	1	7	3.5	4	7		6	10	3.5
Plumbing	0			1	2		0		
Food Processing	0			3	5		3	5	
Cooperative	0			3	5		2	3	
Others	0			0			4	7	
Total	13	100		58	100		61	100	

Table 12 shows that the two selected barangay, barangay Namayan and Caliligawan the common training attended by the respondents are cooking due to reason that it is one of the best business opportunities now a days.

Table 13. Frequency and Percentage Distribution of the Business Opportunities of the Respondents within the Barangay

Business opportunities within the barangay	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
None	3	27	2	2	3		1	2	
Merchandising	6	55	1	38	49	1	34	62	1
Water delivery	1	9	3.5	0			2	4	
Massage	0			0			1	2	
Beauty Parlor	0			2	3		2	4	
Sewing	0			25	32	2	7	12	2
Automotive	1	9	3.5	7	9		6	10	3
Plumbing	0			1	1	3	2	4	
Others	0			2	3		0		
Total	11	100		77	100		55	100	

Table 13 show that there is one common business opportunities in these three selected barangays and that is merchandising business. It may be because this is one type of business opportunities where they can gain income easily because for the reason of the location of the three selected barangays in the market place. Another reason that selling merchandises like some important needs of the consumers can give them profits and this type of business is easy to form.

Table 14. Frequency and Percentage Distribution of the Reasons Why the Fishermen Cannot Use their Skills and Trainings Offered by the Local government units (LGU) and Non-Government Organizations (NGO)

Reasons	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
Lack of capital	6	26	2	33	27	1	25	27	2
Lack of Material	9	40	1	31	26	2	36	40	1
Lack of trainings	4	17	3.5	27	22	3	18	20	3
Lack of Knowledge	4	17	3.5	24	20		12	13	
Others	0			6	5		0		
Total	23	100		121	100		91	100	



The table 14 shows that the reasons why the respondents cannot use their training as business opportunities are lack of materials, lack of capital and lack of trainings.

Table 15. Frequency Percentage Distribution of the Skills and Trainings to be Proposed in Order to Help Fishermen in the City of Malolos Coastal Areas to have Business Opportunities

training/ workshop to be proposed	Caliligawan			Masile			Namayan		
	F	%	Rank	F	%	Rank	F	%	Rank
Merchandising	4	19		15	17	3	24	38	1
Cooking	1	4		20	23	2	6	9	
Sewing	2	9		9	10		7	11	3
Automotive	7	33	1	24	27	1	22	34	2
Plumbing	1	5		6	7		1	2	
Food Processing	2	10	3	12	13		0	0	
Cooperative	4	19	2	3	3		2	3	
Others	0			0			2	3	
Total	21	100		89	100		64	100	

The table shows that the respondents of Barangays Masile and Caliligawan find more interest in automotive trainings while for the respondent of barangay Namayan they chose merchandising.

### Conclusions

Based from the aforementioned findings, the researcher made the following conclusions:

1. The demographic characteristics of the three barangays showed that as population increases the number of sari-sari store or business establishment also increases therefore the total number of sari-sari store or business establishments varied through the total number of population.
2. The profile of the respondents showed that most of the respondents in coastal areas are of legal age and therefore more capable of handling business. It can be seen that most of them are married and have attained elementary level only the reason why they are willing to have trainings to have business opportunities that may help them to prepare the future of their children. That most of the respondents belong to "Samahang Kababaihan" even though majority of the respondents were male therefore the women are more active to join an organization.
3. For the existing status of the fishermen it showed that among the three barangays, the respondents from barangay Namayan were more resourceful to look for their financial resources therefore they have the ability to stand-alone.

With regards to skills, training and workshop attended It can also be seen that majority of the respondents have no formal trainings from Local Government and NGO they had gain their knowledge or skills in merchandising only by observing and through media particularly the television that proof that the majority of the respondents were willing and eager to gain knowledge.

1. That most of the respondents in coastal areas are not aware that some of the resources and materials around them can be used as business opportunities.
2. That most of the respondents are willing to have trainings such as automotive and merchandising to have business opportunities.

### Recommendations

On the basis of significant findings and conclusion of the study the researcher would like to recommend the following:

1. The output of this research is highly recommended for the Extension Service of the College of Business Administration of the Bulacan State University since they are more equipped to give knowledge in marketing strategies and basic bookkeeping and other related trainings that will help the respondents to be more profitable in their sari-sari store or merchandising business.
2. The findings of this study will have a great impact for the business opportunities of the three-selected barangay. The study shows that most of the respondents are of legal age and resourceful therefore they have the capacity to handle business but still there are some factors that need to improve in order to help them to be more



profitable in business and since it was shown that women are more participative than men, the researcher also recommend to give more trainings for women.

3. What hinder them to enter into business are lack of capital, trainings and knowledge to have business opportunities. Therefore the government must give livelihood program with starting capital in order to support and sustain the needs of these communities for them to have a better life.

4. Most of them were not aware that the materials around them can be used in as business opportunities the researcher would like to recommend also to give them trainings on how to make more money on the things around them.

5. Since majority of them find interest in livelihood training the under taking is also recommend to some institutions, who can adopt and can give programs/trainings needed in these communities that will help them enhance their skills .The researcher also recommends to create a core group within each barangay that will help in sustaining the program.

6. Future researcher may use this study as reference for their research.

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## **ALS Teachers' Instructions In Bacolod City: A Narrative Inquiry**

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### **Abstract**

This study attempted to explore the Alternative Learning System (ALS) teachers handling ALS instructions to the out-of-school youths/students in Bacolod City. This study was based on Philippine Education for All (EFA) 2015 plan is a vision and a holistic program of reforms that aims at improving the quality of basic education for every Filipino by 2015. This study has utilized the qualitative method of narrative inquiry, perceptions and stories were collected from ALS teachers in Bacolod City, and analysis of the information to determine their teaching competency lives according to their perceptions was possible. Moreover, one must be skilled in the art of data collection; a self-designed protocol may be needed to facilitate information from various locations and people involved (Leary, 2011). The researcher has revealed the thematic reflection as "Alternative Learning System (ALS) is linked with Patience, Learning, and Understanding for the learning process to reach the goal of success", while the thematic insights revealed as "Alternative Learning System (ALS): Determination, Hard work and Ambition to reach the goal in life by producing modules in real-life activities/situations", and the eidetic insights opened as "ALS as a whole is challenging towards out-of-school youths and adult education as the same quality instruction/education as what formal schooling will provide to the students". The researcher has noted that participants were challenged in teaching ALS students particularly adults and out-of-school youths who are working for living but they need quality education not in a formal school. Thus, it is recommended that the improvement of the instructional modules in teaching ALS will help the students learn with use of the latest technology to keep abreast in learning using technology not only in modules alone and further research to be conducted in Alternative Learning System to confirm the result of the present study.

Keywords: Alternative Learning Students, holistic, modules, and out-of-school youth

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### **Rationale/Background of the Study**

If one were to ask the man on the street what he understands of the word “education,” almost always, his answer would be “going to school in order to learn.” To common man, education is predictably associated with learning that takes place in schools, this is a general perception historically based on tradition. On the other hand, it is best to trace the source of an educational system such as the Alternative Learning System (ALS) to the basic and fundamental law of the land, which Philippine Constitution provides for free, and compulsory elementary education and free secondary education through the Department of Education (DepEd). This means that all Filipinos have a constitutional right to basic education, and the DepEd is mandated to provide this service to all Filipinos.

Specifically, alternative learning is the most practical way of learning for those who are economically challenged. However, there are many ways to learn nowadays not only in school but even in home; learning at least like school scenario can offer will be also available to home based instruction. According to the Department of Education (DepEd, 2001), alternative learning system (ALS) is another kind of education that does not need to take place in school but is as good as formal schooling. The DepEd further said that alternative learning system is to help those who cannot “go to school to learn” or who do not want to “go to school to learn” for formal schooling but can learn out school setting. They also include those who have never gone to school are varied like absence of a school in the community, need to work to augment income, disability, no money for school-related expenses, gender discrimination, different learning style, etc. but most of the time, generally, the reasons are directly linked to poverty (Department of Education, 2009). Moreover, poverty is hindrance for formal schooling thus, most of them, can't go to school and end up illiterate. In the 80's the global community launched a campaign called Education for All (EFA) that aimed to eradicate illiteracy and promote functional literacy for all peoples of the world. Our nation was a signatory to this and as such, committed to providing education for all Filipino.

On June 6, 2001, the Philippine Congress passed a law that defined the governance of basic education. Among many of its provisions, this law recognized the ALS as a complement of formal education and a major component of basic education with a clearly defined role within the overall educational goals. In the words of Hon. Rico Judge Echiverri in ALS Convention last 2009, “One of the innovative provisions of the 1987 Philippine Constitution is the provision touching on Alternative Learning System. Under Article XIV, section 2(4) it is said that the State shall encourage non-formal, informal and indigenous learning systems, as well as self-learning, independent and out-of-school study programs particularly those that respond to community needs (ALS Convention, August 2009, Baguio City). While, Senator Manny Villar said that the advent of ALS offers a new dimension and a paradigm shift for non-formal education that will ultimately address and satisfy the legal requirements of Republic Act 9155. ALS is an independent complete learning system as it addresses the various learning styles and needs of learners. Learners are fully given discretion of the kind and method of learning they wish to acquire, including the use of information technology. A system and mode of certification and/or accreditation will be put in place to enhance the employability of those who bravely get into it (Speech delivered by Sen. Manny Villar during the ALS Convention 2009, Baguio City).

The DepEd said that there are marginalized members of our society: the rural and urban poor, prisoners, children in areas of armed conflict, indigenous peoples, laborers, etc. This marginalized members of the society needs alternative learning system as provided in the 1987 Philippine Constitution under Article XIV, section 2(4) states that the state shall encourage non-formal, informal and indigenous learning systems, as well as self-learning, independent and out-of-school study programs particularly those that responded to community needs (1987 Philippine Constitution). As reflected in the Republic Act 9155, otherwise known as the Governance of Basic Education and to make such education accessible to all by providing all Filipino children a free compulsory education in the elementary level and free education in the high school level with central emphasis of including alternative learning education system for out-of-school youth and adult learners (RA 9155 of 2001).

The government will conduct training and provide qualified ALS teachers/facilitators to deliver the instructor just like as in the formal schooling. The new teacher in the public educational system and as an ALS teacher will find out the experiences he/she undergone in handling the ALS of the Department of Education. Hence, this study will provide information and continuing innovations for quality ALS instructions and basis real-life educational modules.



### **Research Objective**

This study aimed to explore the lived experiences of Alternative Learning System teachers of Bacolod City and performances of their teaching proficiency to the ALS students and facilitation of ALS instruction/education.

1. What are the profiles of the ALS teachers of Bacolod City: tenure of service; seminars and trainings; and eligibility?
2. What are the lived experiences of ALS teachers facilitating ALS students and effectiveness of their teaching competency in handling ALS instructions?
3. Based on the results, what are the implications to Alternative Learning System Education in order to enhance and strengthen the quality of instructions and quality ALS students of the said system?

### **Conceptual/Theoretical Framework**

This study was anchored with the Philippine Education for All (EFA) 2015 plan is a vision and a holistic program of reforms that aims at improving the quality of basic education for every Filipino by 2015 (Education for All 2015 Action Plan Handbook, 2006). The said plan was linked on the Dakar Framework of Action during World Education Forum in April 2000 in Dakar, Senegal and adopted by various participating countries including Philippines. Moreover, the Dakar Framework of Action was the documentation of the right of every child, youth, or adult to benefit from education that will meet his/her Basic Learning Needs (BLNs) including the full development of human personality. The World Declaration on "Education For All" prescribes that Basic Learning Needs shall be made available to all by various means. BLNs comprise both the essential learning tools (literacy, numeracy, oral expression, and problem solving) and the basic learning contents (knowledge, skills, values, and attitudes) requires by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning.

This study is also anchored Social Identity Theory by Henri Tajfel and John Turner in 1979 that there are mental processes involved in evaluating others as "us" or "them". This further asserts that group membership created in-group/self-categorization and enhancement in ways that favor the in-group at the expense of the out-group. The examples (minimal group studies) showed that the mere act of individuals categorizing themselves as group members was sufficient to lead them to display in-group favoritism. After being categorized of a group membership, individuals seek to achieve positive self-esteem by positively differentiating their in-group from a comparison out-group on some valued dimension. This quest for positive distinctiveness means that people's sense of who they are is defined in terms of 'we' rather than 'I'. Therefore, this theory applies to ALS students who are more comfortable to use their native language and understands if the ALS teachers use the native language in teaching because the theory has a considerable impact on social psychology. It is tested in a wide range of fields and settings and includes prejudice, stereotyping, negotiation and language use. The theory has also implications on the way people deal with social and organizational change.

### **Methodology**

The purpose of this study was to explore the lived experiences of teaching competency in handling ALS instructions in Bacolod City and the implication to the ALS teaching competency for the enhancement and development of the said program. These aspects of experiences of ALS teachers in their teaching competency cannot be easily measured by using statistical explanation or any rubric procedures.

Furthermore, by utilizing the qualitative method of narrative inquiry, perceptions and stories were collected from ALS teachers in Bacolod City, and analysis of the information to determine their teaching competency lives according to their perceptions was possible. Mandates from Department of Education created the need for alternative education programs, yet little to no research has been documented in alternative learning system.

The narrative inquiry process facilitates gathering experiential knowledge that must be understood in the context of the individual telling the story. These experiences are related to the research topic, but are from the individuals' points of view at a certain time and place. These experiences add to the essence of the research and the education and learning that may otherwise be overlooked. The narrative process is to "seek to collect data to describe . . . lives" and the narrative analysis "can be applied . . . [to] an in-depth interview". In analyzing narratives, the researcher works actively to find the voice of the participant in a particular time, place, or setting,



and to question and document all information, as it exists. The researcher does not want to restrict any information from the individuals being interviewed. One must be skilled in the art of data collection; a self-designed protocol may be needed to facilitate information from various locations and people involved (Leary, 2011).

On the other hand, all information, once transcribed, was included in this study. This study attempted to provide a description of ALS teachers in Bacolod City on their teaching competency in handling ALS students using bilingual approach and experiences based on their recollections and statements about their own feelings, perspectives, and perceptions.

According to Creswell and Miller (2000) cited by Leary (2011), qualitative research gives us the opportunity as human beings to make the right decisions as they affect those around us. Narrative inquiry is a tool that can make those changes happen. This explained that storytelling allows individuals to reflect upon life and gives them a chance to explain themselves to others, creating meaning for the individual and for those reading or listening to the story. Each interview was recorded and transcribed. This information is now available for others to read and allows people to reconstruct their lives in the educational setting. Understanding the perceptions of others begins as gathering stories that come together, and each reader can critically reflect upon the conditions that constrained or enlightened the person telling the story. Transformation of learning can occur when individuals or groups of people come together and find a **common theme** in which they wish to change.

Each ALS teacher has had similar experiences, but may have been affected differently and may have their own personal view. Qualitative research via narrative inquiry was chosen in this case to capture the personal experiences and perceptions of participants. The narrative approach allowed the opportunity to interview the participants firsthand and individually. The researcher here was trying to use the Moustakas' phenomenological research method in presenting the experiences to scrutinize the nucleus of truth and the eidos.

The ALS teachers had the opportunity to share their experiences while they are in the service as ALS teacher. No information was edited unless names and places were revealed breaching the agreement of confidentiality. The inquiry area was in a comfortable, relaxed setting such as the library or a private conference room of a public school. Furthermore, probing will exploit during face-to-face in-depth interview in order to cull the essence of truth.

## Results and Discussions

This chapter presents the data of the lived experiences of Alternative Learning System teachers/facilitators of Bacolod City when the participants profile is presented through narrative forms from the transcript taken from the interview of the participants. The data from the interview were processed using narrative inquiry.

### *Qualitative Presentation*

The present researcher asked the participants for an interview and taking relaxing conversation. The researcher was listening and observing the participant's manner, reaction, and feeling while conversing with them. Moreover, the researcher used field notes and computer audio-recorder with the permission from the participants and the researcher was making initiative for many times to "sift and scrutinize" the essence of truth through interview. The researcher categorized its narrative descriptions and answers through thematic reflection, thematic insights, and eidetic insights.

### The Profile: Tenure Of Service, ALS Training/Seminar-Workshops, And Eligibility Examination (Questions # 1)

#### *Extracts from the transcript*

First Participant

... 3 years.

... yes. Ang first ko nga seminar sang pag appoint lang sakon ni ma'am ah insigida lang gid to ya (*Yes! The first seminar which my superior appointed to me was an urgency for me to attend*). Nang iya sang alternative learning system ah IMs.

...Instructional Managers ang gin atenan ko nga seminar sa Mambukal (*I attended the alternative learning system...Ah!... IMs- Instructional Managers in Mambukal*).

... August 2005. Ah! LET. Licensure examination for Teachers.



#### Second Participant

... ah 4 years. Ah... ah! first year ko gid na teaching sa ALS (*Ah! That's my first year in ALS teaching*).  
... ah! about sa how to conduct classes sa mga out of school youth iya pagid na mga learning strands within sa modules (*Ah! About on the how to conduct classes in the out of school youth is the learning strands within the modules*). Mga strategies then the subjects and the learning strand about the in communication arts in English, Filipino nang numeracy at account at Araling Pan (*The strategies of subjects and the learning strand about in the communication arts in English, Filipino as well as the numeracy and account and Araling Panlipunan (Social Studies) subjects*).

... Last ah that was ah...i can't remember...19...ah napermanent ko is 1995. December that was ah 1992 yata (*I can't remember...19...Ah! when I was permanent in 1995... December 1992. I guess, 19*).

... ang pinakalast ni bala sang...a PBET na (*that was the last...PBET (Philippine Board Examination for Teachers)*).

The researcher presented the data taken from interview for question number 1 had undergone confirmation for clarification from each participant and some terms in dialect (Hiligaynon) have no exact translation in English language but instead it was translated in the same thoughts from the dialect to English.

#### The Lived Experiences Of ALS Teachers Facilitating ALS Students And Effectiveness Of Teaching Competency In Handling ALS Instructions (Questions # 2)

##### Thematic Reflection

*Alternative Learning System (ALS) Is Linked With Patience, Learning, And Understanding For The Learning Process To Reach The Goal Of Success*

#### Extracts From The Transcript

##### First Participant

... yes. Kay ah kay pag seminar ko sa ALS didto ko nabal-an nga mahandle ka gali sa mga out of school youth nga wala pa sila katapos sa formal school (*Yes... Kay ah! In my seminar in ALS, I learned to handle out of school youth and those who didn't finish formal schooling*).

... Ah mga drop outs sila sa high school, elementary especially the BLP. The basic literacy program. Ang mga indi gid bala kabalo basa, mga indi kabalo magsulat (*Ah! Those are dropouts in high school especially elementary, the basic literary program, those who are illiterate in reading and writing*).

... yes. Ah nagchange gid akon nga teaching methods kay once magtudlo ka sa ALS may module sila (*Yes! There are changes in my teaching methods, once you are teaching ALS, they have*). Like ya sa formal school may ara kaya gina tamdan (*Just like a formal school, there are notes*). May lesson plan ka (*You have lesson plan*).

... ah nagdugang...ah nagdugang experiences ko sa pagtudlo sang ALS kay indi lang sa formal school kay may ara ka nga gina tawag nga ano ni gani man...ah gina sundan. Sa ALS ya kung ano gina hatag mo sila amo na sya ang imo nga itudlo (*Ah! It adds... It adds experiences in teaching AIS not only in formal school but you can call this...this is a guide. In ALS you have a guide to follow*).

##### Second Participant

... huo nadugangan eh. Syempre eh kay nadugangan kay teh lain naman ya na mga...pero atleast the same mo man lang japon na mga strategies (*Yes!... it adds eh! Of course eh!... The additional is different at least the same as what you're strategies you have*).

... ah atleast ang...ang pagconduct sa mga, sa mga out of school youth bale daw more sila sa activities... (*Ah! At least the... the conduct in out of school youth are more in activities...*)sa sa more activities nila nho! (*in more activities for them nho!...*) application sa mga life nila compare siya sa formal school more ang theories than...(*application in life compared in formal school discusses more on theories*)... kay sa ila ya sa kwan ya more sa real life (*however, for them is more in real life*).

... kilanlan ang imo patience noh (*Patience is needed nho!...*)...ang ang patience kinanalan gid llonggo mu gid ang patience mo (*You need to have patience translated to dialect what is patience*). Ah lawigon mo gid ang patience





mo at the same time ang understanding (*Ah! You have to extend your patience at the same time understanding*). Ah kay ang out of school...school youth and adults difference kay kis'a ang imo kinanglan e understand mo man nah sila. (*Ah! The out of school... school youth and adults are different and something you need to understand for them*).

...inang learning process daw behind katama daw bala natuktukan na ang mga utok nila (*There learning process is left behind, just like corroded things in their brains...*)

... kung kis-a wala gid na gana sa paglearn kinanglan may mga activities kada. Ah may praising song ka da like song nga para ma lively ang lesson (*There is sometimes that they no eagerness in learning but you need to have activities like praising song to have lively lesson*).

#### Thematic Insights

*Alternative Learning System (ALS): Determination, Hard work And Ambition To Reach The Goal In Life By Producing Modules In Real-Life Activities/Situations*

#### Extracts From The Transcript

##### First Participant

... time management sa ila. Kay usually ang amon nga mga learners galambot mga 200 (*Time management for them (Learners) because usually my learners reached 200 in a group*).

... Para ma akumuladar man sila nga matudloan ko gid sila na daw indi bala hambal na daw hapaw lang gid sa ila ang ginatawag na ALS (*So that I can accommodate the ALS learners not in half bake as we can call but quality ALS education*).

... Ahm pero naghambal man sila sa akon na may ara ko kuno na ginatawag ni na ability na makatudlo sa out of school youth (*Ahm! They (fellow teachers) said that I have my ability to teach the out of school youth*).

... ah mga materials naman kay among mga materials na ginagamit is the modules, pag reproduce sa modules Teh initiative mo gid na mapareproduce sang modules para may ihatag ka man sa imo mga learners. Para may may maitun'an man sila. (*Ah! The materials and the materials you produce and initiative in producing materials for learners for the students to study*).

##### Second Participant

... Kung determinado ka ang imo nga goal nga gina look forward amo na malambot mo (*If there is determination, you can reach your goal and looking forward that goal*). Kinanglan laktan mo sang kapisan mo sang dedication (*You need hardworking and dedication*).

...Pero kung may goal ka ya sa life mo, kung may ambition ka sa life mo ang goal mo na or ambition mo ma reach mo gid kung determinado ka (*But if you have goal in life, if you have ambition, you can reach it if you have determination*).

... May ara kis'a na group na kanami sila ka mga attentive. (*There is sometimes that they are attentive*). ah eager gid mag learn may ara man na group na daw pawala system bala (*Ah! They are eager to learn but there is group that they never mind the learning*).

... Subong naga reproduce ko modules. Kay at least isa isa. May ara gid ang individual sang pagtudlo sa ila (*This time, we produced modules, at least one by one. there is individual teaching for them*).

... ah okay nag more ko sa pag reproduce modules kay amo gid na ang problem namon mo kay before wala ko sang modules kabudlay budlay gid...gina butang ko pa sa blackboard (*Ah! Okay! You produce more modules because that's our problems before we have no modules, it difficult for us because we need to write in the blackboard*).

#### On the Insights and Implications to Alternative Learning System

- The Alternative Learning System (ALS) is under the supervision of the Department of Education therefore the department must look an initiative to provide intensive trainings and to provide quality modules suited to real life education and bilingual education specifically "Hiligaynon" for out-of-school youth and adult students.
- The adult and out-of-school (ALS) students must directly benefit from this bilingual education program to acquire diploma in modular basis (English-Hiligaynon modules) because the students are mostly working. The modules must focus the values and the importance of education in their life because as of this time, the modules in Bilingual Education were written in English-Tagalog modules.





- The teachers/facilitator will upgrade themselves for the latest and up-to-date technology so that the ALS students will update the newest teaching strategies with use of technology.

#### Eidetic Insights

*ALS as a whole is challenging towards out of school youth and adult education as the same quality instruction formal schooling will provide to the students*

According to John Dewey, "learning by doing." The alternative learning system is linked with the statement of Dewey because it is challenging when handling ALS students. The following statements below are the extractions from the data of interviews:

#### *Extracts from the transcript*

... Ah. Kay usually amo mana sila dyapon imo na atubangon. Mga out of school youths, ah wala sila katapos sa pag eskwela, mga dropouts, and usually mga illiterate people (*Ah! Usually, it is the same students you will encounter, those who didn't finish education, dropouts, and illiterate people*).

... ah sa akon lang daw okay gid ko. Satisfy gid ko nga ara ko sa ALS kay te enjoy ko ya sang sa formal school. kay daw dira nana nga level teh kung mga adults ya te challenging (*Ah! For me is okay. I am satisfied as part of ALS because I enjoyed compared to formal school. In that level with adults ya! It is challenging*).

The present researcher strongly believed in the challenging moments comes will replenish the brightest future to reach the goal of success. This statement is supported by Bill Clinton, 1994 as he stated that "we are living in a world where what you earn is a function of what you can learn." The implication of the words of Clinton is challenging remarks to the teachers and students to learn effectively in order to survive and make a living.

Moreover, if we are to respond to this demand, an entire restructuring of curriculum and pedagogy at the secondary level will be required. This is an enormous task, but one in which some school systems have succeeded. However, research has found that those systems that have successfully implemented school-to-work transition programs have been supported by a recognized need for such a program on the part of all involved. Most programs began by the recognition of the need for better career preparation by the parents, students, and administration. This implies that such a reform requires both bottom-up and top-down demands to be successfully addressing and acted upon. It also demands that the entire community get involved.

#### **Conclusions and Recommendations**

From the findings that surfaced, conclusions have been drawn, and relevant recommendations suggested.

Based on the major findings of the study, the following conclusions were drawn:

The participants challenged in teaching ALS students particularly adults and out-of-school youth who are working for living but they need quality education not in a formal school. The state time-to-time reviewed the program for ALS through the Department of Education down to the districts level. Eventually individual was become a cooperative in the network of individual systems is working together into the next decade. By allowing the system to develop in the improve manner, no one program was the standard as always continuing with the time and trends of education. Room provided for individual needs to be met at the local level, while experiences, both successful and unsuccessful, can be shared nationally to develop better programs all around.

Furthermore, this inquiry helped the future researchers to look other factors in validating the present research.

As stated in the conclusions, the present researcher pointed out some recommendations:

1. It is recommended that there is a need in continuing the ALS training programs for teachers/facilitators thus, the continuing programs will be based on the rationale of ALS provided by the Department of Education under the office of the President for the enhancement of the ALS curriculum.
2. It is recommended that the teachers/facilitators must have updated modules concerned with real-life and lively activities for the students to learn as what John Dewey said "learning by doing."



3. It is recommended that the improvement of the instructional modules in teaching ALS will help the students learn with use of the latest technology to keep abreast in learning using technology not only in modules alone.
4. It is further recommended this study is a springboard for further research in Alternative Learning System to confirm the result of the present study.

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## **Factors That Make Elementary Pupils Happy**

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### **Abstract**

The Elementary Christian Living teachers of the School of Saint Anthony conducted a survey among their pupils regarding the factors that make them happy. The purpose of this research is to bring awareness regarding the things that Elementary pupils' value in life leading them to happiness. This will also serve as a glimpse of pupils' values and to determine the factors that will motivate them in their everyday lives.

The following results were derived from the study's findings: Grade one pupils are happy when they are with their families and when they play toys and gadgets. Grade two pupils, on the other hand, are happy with their family, friends, toys and gadgets. Moreover, Grade three pupils enjoy being with their family and friends, and with new toys and gifts. As for the grade four pupils, they enjoy bonding with their families and friends, when they eat their favorite food and when they see their teachers. Furthermore, Grade five pupils love their family and are happy with new gadgets and toys. They are also happy when they play with their pets and friends. Lastly, the family serves as an important factor that makes the grade 6 pupils happy. Friends, gadgets, high grades and praying to God are the other encouraging factors of the grade 6 pupils' gladness.

Findings reveal family as the top consistent factor that makes the Elementary pupils happy. They enjoyed the different activities and experiences they had with their family members. Toys and new gadgets were also consistent factors that make the lower school pupils happy. Relationship with friends, on the other hand, serves as an important factor that inspires the Middle School pupils to be happy.

Among Filipinos, across time, family remains as the source of happiness among children. This research recommends the parents to be more reflective of the moments they spend with their children and to be more sensitive with their interests and needs. This research implies the impact of families to their children's emotional development and the deep significant marks they leave in the lives of their children.

**Keywords:** Elementary, happy, School of Saint Anthony, Family

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## Introduction

The Elementary teachers commonly ask questions about children's emotions such as how they feel for the day to their students. This is usually evident during teacher and student interactions or written activities. Parents ask their children the same questions as well.

Siegler (2006) discussed that children's emotional development is influenced by parents' socialization of their children-that is, their direct and indirect influence on their children's standards, values and ways of thinking and feeling.

Teachers, parents and other significant adults in the lives of the children found it pioneering to explore on the feelings of the children especially on certain factors that make them happy or sad.

The CL/GMRC teachers of School of Saint Anthony found interest in determining the different factors that make Elementary pupils happy. This study involves 984 elementary pupils from Grade 1 to 6, ages six to twelve years old.

## Statement of the Problem

1. How do the factors that make Elementary pupils happy vary in each grade level?
2. What are the common factors shared by the students in each grade level?
3. What are the themes that emerged in the factors shared by the Grade School students?

## Methodology

### *Research Design*

The researchers used the descriptive design in the form of survey in gathering the data. The study is exploratory in nature. The research design is largely an investigative process whereby the researcher gradually makes sense of a social phenomenon by contrasting, comparing, replicating, cataloguing and classifying the object of the study. In this regard, the researchers valued every detail shared by the participants and considered significant for the study.

### *Participants of the Study*

The participants of the study were the grade school students of the School of Saint Anthony from levels 1 to 6. There were 142 students who submitted their reflection activities from grade 1, 157 students in grade 2, 162 students in grade 3, 148 students in grade 4, 175 students in grade 5 and 200 students in grade 6. Table 1 presents the frequency distribution of the participants per grade level.

Table 1. Distribution of Participants per grade level

Grade Level	Number of Participants
Grade 1	142
Grade 2	157
Grade 3	162
Grade 4	148
Grade 5	175
Grade 6	200
Total	984 students

### *Research Instruments*

The instruments used in this study were the intermediate papers and pens used by the grade school students in writing the factors that make them happy. Likewise, the researchers had tally sheets to note the responses of the students. A computer and calculator were also used to add the frequency of responses and in formulating the tables to be used for the research analysis.

### *Data Gathering Procedure*

The CL/GMRC Department brainstormed about a research to determine the factors that make Elementary pupils happy. The grades 1 and 2 pupils were guided by their teachers in writing the activity. Grades 3 to 6 students



wrote their essays independently and the students were given enough time to finish their activity. Afterwards, the CL/GMRC teachers checked the essays and tallied the responses

#### Data Analysis

Frequency/ Percentage was the statistical tool used in this research whereas the responses of the students were grouped and tallied per level, and the corresponding percentages were computed.

#### Results and Discussion

Throughout human civilization, great philosophers, religious leaders and scholars have asked themselves these basic questions – What is happiness? What makes a person happy? According to Franklin D. Roosevelt, happiness is not in the mere possession of money; it lies in the joy of achievement, in the thrill of creative effort.

The Elementary Christian Living teachers of the School of Saint Anthony discovered just a little bit simpler definition of happiness based on the result of the survey conducted to their elementary pupils. The elementary pupils were divided into two departments. The first group of pupils is from the Lower School. They are pupils from Grades 1 to 3, ages 7 to 9 years old. The second group on the other hand, is from the Middle School. They are pupils from Grades 4 to 5, ages 10 to 12 years of old.

Table 2 reveals that the number one factor that makes lower school children happy is their family. Other factors that can influence their happiness are other important people in their life such as their friends and teachers. Likewise, younger children tend to consume most of their time in play. This may be attributed to the results that gifts, toys and gadgets children use in playing can also stimulate their happiness.

Table 2. Top 5 Factors that Make Lower School Pupil Happy

Rank	Grade 1		Grade 2		Grade 3	
	Factor	Percentage	Factor	Percentage	Factor	Percentage
1	Family	74%	Family	77%	Family	69%
2	Play	43%	Friends	46%	Friends	44%
3	Toys	37%	Toys	39%	Toys	39%
4	Gadgets	34%	Gadgets	25%	Gifts	32%
5	activities	32%	Teachers	23%	playing	23%

Similarly, Table 3 also shows that the number one factor that can make pupils happy in Middle School Department is also their family. Friends, teachers and even pets also played an imperative role in their happiness. As the pupils mature, their perception of happiness became deeper. Having good grades is now important to them. Moreover, the existence of God was cited in the results. This supports the findings that spirituality and other factors such as temperament and social relations were found to affect an individual's sense of happiness in a recent student testing of 315 children aged 9-12. (Morthenson, 2008).

Table 3. Top 5 Factors that Make Middle School Pupil Happy

Rank	Grade 4		Grade 5		Grade 6	
	Factor	Percentage	Factor	Percentage	Factor	Percentage
1	Family	75%	Family	72%	Family	78%
2	Friends	54%	Gadgets	48%	Friends	54%
3	Food	27%	Toys	43%	Gadgets	39%
4	Teachers	22%	Pets	39%	Grades	22%
5	Grades	20%	Friends	35%	God	20%

#### Conclusions

It is very evident in the results that elementary pupils' age 7 to 12 years old has only one common factor that can make them happy. Most people equate the happiness of the children to new clothes, a new toy or gadgets without even noticing that children are happier when they are talking, playing and spending quality with their family.

Based on the results, this study suggests that spending time with people they love like family, friends and even pets played a very important role in making the children happy and secure. Happiness of children begins with a



healthy relationship with these significant people in their lives. There is one ingredient of soft love, that is being there, or in other words having time. Certainly it's important to have special times with children to make them happy (Biddulph, S. 2003)

### **Recommendations**

Being happier is something we can all choose to do. The following are the recommendations of the researchers to help children develop positive outlook in life and maintain stable emotions.

#### *For the parents*

Every child needs love and care for healthy growth. Always prioritize your child in every aspect. Give your child a special quality time every day. Pay attention to your child's interests and passions. Helping your children develop passions and strengths will probably help them with the areas of difficulty as well. Encouragement and words of appreciation matter a lot.

#### *For the teachers*

Know more about your pupils by giving them individual conference and encourage the pupils to ask questions. Constant communication with the families of all pupils is important. Securing parental involvement is vital for many reasons, including the ability to learn more about the child, to gain support of parents in meeting educational and social goals, and providing parents with information they need and want. Additionally, the school can also provide activities that can help strengthen the bond of child and parent.

#### *For other future researcher*

The frequent adult assumption that toys, clothes and other material things lead to happiness of children needs to be reevaluated and simple social interactions explored.

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## **Remedial Teaching Practices In Secondary Schools Of Northern Samar**

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### **Abstract**

The problem of poor quality in education has been traced to a number of causes, which include socio-economic factors, teacher-related factors, inadequate learning materials, and the short and congested school curriculum, among others. With this result, it is therefore imperative to organize remediation programs in low performing schools to address the needs of the learners to achieve desired learning outcomes and to enhance faculty's teaching competence.

The study determined the remedial teaching practices employed by secondary school teachers in both public and private schools in Northern Samar. It also found out the difference between the extent of remedial teaching practices as perceived by the teachers and students and if there was a significant difference between the extent of practices of public and private secondary schools in Northern Samar.

The descriptive-comparative method was utilized in the study using a researcher-made survey questionnaire as the primary instrument. The study was conducted in twenty (20) public and private secondary schools in Northern Samar selected based on the results of the National Achievement Test (NAT) from 2010 to 2011. Frequency counts, percentages, and weighted mean computations were used to analyze the data obtained. The t-test was used to test the difference between the extent of remedial teaching practices as perceived by the secondary teachers and students and the difference in the extent of remedial teaching practices among public and private secondary schools in Northern Samar.

The remedial teaching practices of the secondary school teachers were rated "extensive" by both teachers and students. There was a significant difference between the perceptions of the secondary school teachers and the students on the extent of remedial teaching practices but there was no significant difference between the extent of remedial teaching practices of the public and the private secondary schools in Northern Samar.

**Key words:** remedial teaching, teaching practices, secondary schools

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## Introduction

Education today is facing great challenges. One challenge lies in the area of instruction. Many schools in the elementary, secondary and tertiary levels at present are criticized for not producing quality and competitive graduates. Non-readers and slow learners are perennial problems in the educational system. Achievement level in elementary and secondary education still falls below the standard. In the National Achievement Test in 2010, the average score of high school students in five subject areas was below the passing mark. The lowest scores were registered in language/reading, science and mathematics.

The problem of poor quality has been traced to a number of causes which include socio-economic factors, teacher-related factors, inadequate learning materials, and the short and congested school curriculum, among others. Hence, a remediation program is a must to address the needs of the learners to achieve desired learning outcomes and to enhance faculty's teaching competence. Remedial teaching practice is one that is meant to improve a learning skill or rectify a problem area. Remedial teaching methods/practices involve the use of individualized teaching of students who are experiencing difficulties in specific subject areas. Remedial teaching methods might be taught individually or in groups and target academic weaknesses that may hinder learning.

Based on the pre-survey conducted by the researcher, it was found out that there were no existing remediation programs adopted or used in different public and private secondary schools in Northern Samar. It is along these insights that gave a plausible reason for the researcher's preference to conduct a study on remedial teaching practices in the secondary public and private schools in Northern Samar.

## Statement Of Objectives/Problem

The study aimed to:

1. determine the extent of practice of remedial teaching of the secondary school teachers
2. determine the extent of practice of remedial teaching of secondary schools teachers as perceived by the students;
3. determine the significant difference between the extent of remedial teaching practices as perceived by the secondary teachers and students; and
4. find out the significant difference between the extent of practices of remedial teaching in public and private secondary schools in the province of Northern Samar.

## Methodology

The descriptive-comparative method of research was utilized in this study. The study involved the secondary Science school teachers and students of the low performing public and private schools in the National Achievement Test (NAT) in Northern Samar as respondents. The study focused on which a remediation program is imperative to organize to address the needs of the learners to achieve desired learning outcomes and to enhance the faculty's teaching competence. Complete enumeration of teachers was employed while random sampling was used to determine the student-respondents. A researcher-made survey questionnaire was used as the primary instrument to gather data. Frequency counts, percentages, and weighted means were used to analyze the data obtained from the survey questionnaire while the t-test was used to test the difference between the extent of remedial teaching practices as perceived by the secondary teachers and students and the difference in the extent of remedial teaching practices in public and private secondary schools in the province of Northern Samar.

## Results And Discussion

### *Extent of Practice of Remedial Teaching of Secondary Schools Teachers*

Table 1 presents the extent of practice of remedial teaching of secondary schools teachers in the Division of Northern Samar. The secondary schools teachers rated fourteen (14) practices as "very extensive", fifteen (15) practices as "extensive", two (2) practices as "moderately extensive" and two (2) practices as "less extensive". This indicates that remedial teaching practice was conducted to a high degree in the schools. The most extensive practice was on encouragement of good learning habits. It is a common practice for teachers to inject morale boosting during classes. The least extensive practice was on organizing reading class and conducting Saturday classes. This could be attributed to the lack of time of teachers to squeeze more time for extra classes given the bulk of work of teachers nowadays.



Table 1. Extent of the Remedial Teaching Practices of Secondary Schools Teachers

Practices	Mean	Interpretation
I always encourage good learning habits and attitudes during classes.	4.62	Very Extensive
I give simple/easy direction to group work.	4.55	Very Extensive
I prepare simplified lessons for easy understanding of slow learners.	4.46	Very Extensive
I let the students think well on their answers.	4.46	Very Extensive
I let the students participate in individual activities.	4.43	Very Extensive
I provide more oral and written exercises to reinforce learning to his/her student.	4.41	Very Extensive
I teach simple lessons.	4.41	Very Extensive
I let the students answer take home assignments to further enhance learning.	4.41	Very Extensive
I check immediately the answers of students after quizzes/seatwork.	4.36	Very Extensive
I challenge slow learners to actively participate in classroom discussions.	4.33	Very Extensive
I give reinforcement exercises to let students retain the lessons discussed.	4.32	Very Extensive
I let the students answer orally to find out their difficulties.	4.32	Very Extensive
I indulge in individual paper and pencil tasks.	4.28	Very Extensive
I give exercises on writing, speaking and other relevant tasks improve their performance.	4.21	Very Extensive
I give diagnostic tests to my students to find out their weaknesses and learning abilities.	4.12	Extensive
I give take-home assignments to slow learners.	4.11	Extensive
I should give awards to students whenever there is progress in their performance.	4.08	Extensive
I use visual aids to enhance learning.	4.03	Extensive
I encourage the students for group learning on lessons they failed to master.	4.00	Extensive
I encourage the students to go to the library and find out other learning materials for the subject.	3.99	Extensive
I train the students to indulge in peer teaching.	3.88	Extensive
I tap fast learners as "buddies" to slow learners.	3.83	Extensive
I call parents to a conference to discuss problems concerning their children.	3.80	Extensive
I practice individualized teaching to monitor the students' learning abilities.	3.75	Extensive
I use information technology to help students learn according to their pace.	3.70	Extensive
I remedy students' weaknesses by giving them extra study hour.	3.63	Extensive
I extend more time for class hour.	3.59	Extensive
I use team teaching to discuss a lesson where the students have a poor performance.	3.55	Extensive
I use modules in remediation.	3.41	Extensive
I make a separate lesson plan intended for a remedial class.	3.03	Moderately Extensive
I invite parents to help children in their work.	2.67	Moderately Extensive
I organize reading clubs.	2.45	Less Extensive
I conduct Saturday classes.	2.24	Less Extensive
Grand Mean	3.92	<b>EXTENSIVE</b>

#### *Extent of the Remedial Teaching Practices of Secondary Schools Teachers as rated by Students*

Table 2 presents the extent of practice of remedial teaching of secondary schools teachers as perceived by their students. One (1) practice was rated "very extensive"; the students rated twenty-one (21) practices as "extensive"; nine (9) practices as "moderately extensive"; and two (2) as less extensive.

In general, the students had the same perception with the teachers on the extent of the remedial teaching practices. However, the students rated only one item very extensive. The students perceived that the most extensive practice is the amount of additional oral and written work to reinforce learning. This means that students recognize the effort given by teachers to address learning problems. Least extensive practices include the conduct of Saturday classes and inviting parents to help students do their work. The students may not notice that teachers do invite parents' attention to students' activities during PTA meetings.



Table 2. Extent of Practice of Remedial Teaching Practices of Secondary School Teachers as rated by students

Practice	Mean	Interpretation
The teacher provides more oral and written exercises to reinforce learning to his/her student.	4.22	Very Extensive
S/he lets the students participate in individual activities.	4.10	Extensive
S/he always encourages good learning habits and attitudes during classes.	4.10	Extensive
S/he gives exercises on writing, speaking and other relevant tasks to improve their performance.	4.01	Extensive
S/he lets the students answer take-home assignments to further enhance learning.	4.00	Extensive
S/he teaches simple lessons.	3.97	Extensive
S/he lets the students think well on their answers.	3.93	Extensive
S/he gives simple/easy direction to group work.	3.88	Extensive
S/he prepares simplified lessons for easy understanding.	3.86	Extensive
S/he challenges slow learners to actively participate in classroom discussions.	3.82	Extensive
S/he checks immediately answers of students after quizzes/seatwork.	3.80	Extensive
S/he encourages the students to go to the library and find out other learning materials for the subject.	3.72	Extensive
S/he lets the students answer orally to find out their difficulties.	3.72	Extensive
S/he indulges in individual paper and pencil tasks.	3.72	Extensive
S/he uses visual aids to enhance learning.	3.70	Extensive
S/he gives reinforcement exercises to retain the lessons discussed.	3.64	Extensive
S/he practices individualized teaching to monitor learning abilities.	3.62	Extensive
S/he trains the students to indulge in peer teaching.	3.57	Extensive
S/he encourages group learning on lessons the students failed to master.	3.56	Extensive
S/he gives diagnostic test to find out their weaknesses and learning abilities.	3.52	Extensive
S/he gives awards to students whenever there is progress in their performance.	3.42	Extensive
S/he uses team teaching to discuss a lesson where students have a poor performance.	3.41	Extensive
S/he calls parents to a conference to discuss problems concerning their children.	3.37	Moderately Extensive
S/he uses modules in remediation.	3.28	Moderately Extensive
S/he remedies students' weaknesses by giving them extra study hour.	3.27	Moderately Extensive
S/he gives take-home assignments to slow learners.	3.26	Moderately Extensive
S/he extends more time for class hour.	3.24	Moderately Extensive
S/he makes a separate lesson plan intended for remedial class.	3.19	Moderately Extensive
S/he uses information technology to help students learn according to their pace.	3.12	Moderately Extensive
S/he organizes reading clubs.	2.99	Moderately Extensive
S/he taps fast learners as "buddies" to slow learners.	2.82	Moderately Extensive
S/he invites parents to help children in their work.	2.48	Less Extensive
S/he conducts Saturday classes.	2.28	Less Extensive
Grand Mean	<b>3.53</b>	<b>EXTENSIVE</b>

### Test of Differences

#### Difference in Students' and Teachers' Rating

Table 3 presents the summary result on the difference between the students' perception and that of the teachers on the extent of remedial teaching practices using the t-test. The result revealed that the t-computed value of 3.00 was beyond the critical value of 1.6924 at .05 level of significance, thus the research hypothesis was rejected. There was a significant difference between the perceptions of the secondary school teachers and the students on the extent of remedial teaching practices. This implies that students' perceptions are different from the teachers. The difference could be traced to the fact that students may not know that the identified practice are done by teachers but not really shown to all students.



Table 3. Test of difference between the extent of practice of Remedial Teaching as rated by Teachers and Students

	N	Mean	T-VALUE		Interpretation
			Computed	Tabular	
Students	825	3.53	3.000	1.6924	Significant
Teachers	76	3.92			

#### *Difference between Public and Private Secondary Schools*

Table 4 presents the summary result on the test of difference between the extent of practices of public and private secondary schools in the Division of Northern Samar. The result revealed that the computed t-value of 0.13 was within the critical value of 1.6924 at .05 level of significance, thus the null hypothesis was accepted. There was no significant difference between the extent of remedial teaching practices of the public and the private secondary schools in the Division of Northern Samar. This indicates that secondary schools employ almost the same remedial teaching activities.

Table 4. Test of Difference between the Extent of Practice of Remedial Teaching between Public and Private Secondary Schools

Schools	N	MEAN	T-VALUE		INTERPRETATION
			Computed	Tabular	
Public	58	3.93	0.13	1.6924	Not Significant
Private	18	3.91			

#### **Conclusions**

The extent of practice of remedial teaching by secondary schools teachers is extensive. Remedial teaching to enhance and improve the students' learning habits is highly practiced in the different schools. Both the teachers and students view the extent of practice as extensive, however, there was a significant statistical difference in their views. Remedial teaching is practiced in almost the same extent and degree in public and private schools.

#### **Recommendations**

Based on the findings of this study, the following recommendations are forwarded:

1. Teachers should continue practicing remedial teaching by conducting Saturday classes and organizing reading and Science clubs.
2. With the pupils' learning difficulties and different abilities and styles of learning, teachers should design diversified teaching activities and various teaching methods, help students develop their potential, and provide learning activities and practical experiences to students according to their abilities and needs through separate lesson plan intended for a remedial class.
3. The Division of Northern Samar should provide learning and remedial support to pupils who perform less in their school performance by adapting school curricula, teaching strategies, and educational programs to help pupils consolidate their basic knowledge in different subjects, master the learning methods, strengthen their confidence and enhance the effectiveness of learning.
4. Schools should train their teachers in skills required for effective remedial teaching.
5. A remediation program should be implemented in all tool subjects.
6. It is recommended that a follow-up study be conducted with a wider scope and perspective in terms of respondents and objectives.



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## **Mga Salik Sa Kakayahan Sa Paggamit Ng Pandiwa At Pang-uri Sa Mga Isinulat Na Komposisyon Ng Mga Mag-Aaral Sa Sekondarya**

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### **Abstrak**

Tinukoy ng pag-aaral na ito ang antas ng kakayahan sa paggamit ng pandiwa at pang-uri sa mga komposisyong isinulat ng mga mag-aaral sa Sanayan na Mataas na Paaralan ng Pamantasan ng Silanganing Pilipinas. Tinukoy rin ng pag-aaral ang mga salik tulad ng wika/wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, paboritong leksiyon sa Filipino, at grado sa ikatlong markahan at ang kaugnayan ng mga salik na ito sa kakayahan sa paggamit ng pandiwa at pang-uri ng mga mag-aaral.

Kasangkot sa pag-aaral na ito ang 166 mag-aaral sa apat na antas ng mataas na paaralan. Ginamit sa pag-aaral na ito bilang instrument ng pananaliksik ay pagsulat ng isang pormal o pinatnubayang komposisyon at pagsulat ng isang komposisyong impormal o malaya. Ginamit din ang isang checklist para sa mga salik na nabanggit. Ginamitan ang pag-aaral na ito ng istadistikang angkop sa pag-aaral gaya ng bahagdan, mean, weighted mean at regression analysis.

Karamihan sa mga kalahok sa pag-aaral ay nagsasalita ng Ninorte-Samarnon sa kanilang mga bahay. Ang paboritong babasahin ng mga mag-aaral ay pahayagan. Marami sa mga kalahok ang nanonood ng mga pelikulang Ingles. Ang kanilang paboritong asignatura ay Araling Panlipunan. Ang paborito nilang leksiyon sa Filipino ay panitikan. Marami sa mga kalahok ay nakakuha ng gradong 85 bahagdan sa ikatlong markahan. Mababa ang antas ng kakayahan ng mga mag-aaral sa paggamit ng pandiwa samantalang katamtaman naman ang kakayahan nila sa paggamit ng pang-uri. Sa pagsusuri ng null hypothesis, ang wika/wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, at grado sa ikatlong markahan ay may makabuluhang kaugnayan sa kakayahan ng paggamit ng pandiwa samantalang ang paboritong leksiyon sa Filipino ay walang kaugnayan sa paggamit ng pandiwa. Ang lahat ng salik na nabanggit ay may makabuluhang kaugnayan sa paggamit ng pang-uri.

Inirekomenda ng pag-aaral ang malimit na pagbibigay ng guro ng pagsasanay sa pagsulat ng komposisyon. Makakatulong din sa mga mag-aaral ang pagbabasa ng diyaryo at iba pang uri ng babasahing Filipino at ang panonood ng mga programang Tagalog o Filipino at pelikulang Filipino.

Key words: salik, kakayahan, paggamit ng pandiwa, paggamit ng pang-uri, mag-aaral sa sekondarya

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## Introduksiyon

Ang pagtuturo ng wika ay binubuo ng apat na kasanayan tulad ng pakikinig, pagsasalita, pagbasa at pagsulat. Ang pagsulat ay bahagi ng pagtuturo ng asignaturang Filipino sa lahat ng antas ng pag-aaral. Isa sa mga gawaing pagsusulat ay ang pagsulat ng komposisyon sa iba't ibang paksa.

Ang komposisyon ay isang pangkasanayang sulatin ng mga mag-aaral sa klase. Ito ay isinasagawa nang malinaw at mabisa sa pamamagitan ng maselang pamimili, mahusay na pagsasaayos at masinop na pagpapaunlad ng mga ideya sa pangungusap at talata, nang sa gayon ay makabuo ng isang akdang may mabuti, kawili-wili at makabuluhang nilalaman at may lohikal at orihinal na pormat. Upang maging makabuluhan ang komposisyon, nararapat lamang na sundin ang panuntunan sa pagsulat nito mula sa paglikha ng pamagat, nilalaman, kaayusan, at sangkap tulad ng iba't ibang bahagi ng pananalita lalo na sa paggamit ng pandiwa at pang-uri.

Ang wastong paggamit ng pandiwa at pang-uri ay nagbibigay-buhay at ganda sa isang komposisyon. Makikita sa mga komposisyon ang kanilang kakayahan sa paggamit ng aspeto ng pandiwa o ang pagpili ng pang-uring angkop sa paglalarawan ng tao, bagay, hayop, pook o luan. Nauunawaan din ang nilalaman o kaya ay gustong ipahiwatig ng sumusulat nito kung wasto ang paggamit ng mga pandiwa at pang-uri.

Malaki ang maitutulong sa mga guro sa Filipino kung malalaman nila ang mga kakayahan ng mga mag-aaral sa paggamit ng pandiwa at pang-uri sa pagsulat ng komposisyon. Makatutulong ito sa ikauunlad ng pagtuturo at pag-aaral ng Filipino maging ito ay sa paraan ng pagsasalita o pagsusulat.

## Paglalahad Ng Suliranin

Ang pag-aaral ay naglayong:

1. Matukoy ang antas ng kakayahan sa paggamit ng pandiwa at pang-uri sa mga komposisyong isinulat ng mga mag-aaral sa Sanayan na Mataas na Paaralan ng Pamantasan ng Silanganing Pilipinas;
2. Matukoy ang mga salik sa kakayahan ng paggamit ng pandiwa at pang-uri tulad ng wika/wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, paboritong leksiyon sa Filipino, at grado sa ikatlong markahan;
3. Malaman ang kaugnayan ng mga salik na ito sa kakayahan sa paggamit ng pandiwa at pang-uri ng mga mag-aaral.

## Metodolohiya

Ang pag-aaral na ito ay isinagawa sa Sanayan na Mataas na Paaralan ng Pamantasan ng Silanganing Pilipinas (University of Eastern Philippines Laboratory High School). Ang mga sampol sa pag-aaral na ito ay binuo ng mga mag-aaral sa UEPLHS mula una hangang ikaapat na taon ng *Basic Education Curriculum*.

Ginamit sa pag-aaral na ito ang diskriptibong-paunay na pananaliksik. Ang mga baryabol na makapag-iisa ay binubuo ng mga impormasyon tungkol sa mga kalahok gaya ng wika/wikaing ginagamit sa bahay, paboritong babasahin, paboritong pelikula, paboritong asignatura, paboritong leksiyon sa Filipino, grado sa Filipino sa ikatlong markahan. Ang mga baryabol na di-makapag-iisa ay ang mga kakayahan ng mga mag-aaral sa paggamit ng pandiwa at pang-uri sa mga isinulat na komposisyon.

Dalawang uri ng instrumento ang ginamit sa pag-aaral na ito. Isang pormal o pinatnubayang komposisyon na may iba't ibang antas ayon sa iba't ibang lebel ang pinasagutan sa mga kalahok kung saan ginamit nila ang mga pandiwa at pang-uri. Ang ikalawang instrumento ay pagsulat ng komposisyong impormal o malaya. Binigyan sila ng paksa at sumulat sila ng komposisyon. Sinalungguhan nila ang ginamit na pandiwa at pang-uri. Dito ay ibinawas ng mananaliksik ang mga maling puntos mula sa mga tamang puntos sapagkat walang ibinigay na tiyak na bilang ang mananaliksik kung hanggang ilan ang ginamit sa dahilang ito ay malayang komposisyon. Isang palatanungan naman ang pinasagutan sa mga kalahok na nagsasaad ng mga impormasyon na may kinalaman sa pagtuklas at paglalarawan sa kakayahan ng mga mag-aaral sa paggamit ng pandiwa at pang-uri sa pagsulat ng komposisyon.



Ang mga iskor na nakuha ng mga mag-aaral mula sa mga pagsusulit na ibinigay ay inuri sa mga kategoryang pinakamataas na antas ng kakayahan (24-30 puntos), mataas na antas ng kakayahan (18-23 puntos), katamtaman na kakayahan (12-17 puntos), mababang antas (6-11 puntos) at pinakamababang kakayahan (0-5 puntos). Ang pag-aaral ay gumamit ng mga kagamitang estadistika tulad ng pagbilang, bahagdan, *mean*, at *multiple regression analysis*.

### **Kinalabasan At Pagtalakay**

#### *Antas ng Kakayahan sa Paggamit ng Pandiwa at Pang-uri*

Ipinakikita sa Talahanayan 1 na karamihan sa mga mag-aaral ay may Mababa hanggang Katamtamang antas ng kakayahan sa paggamit ng pandiwa. Nangangahulugan itong kinakailangan ng ibayong pagtuturo sa paggamit ng pandiwa.

Talahanayan 1. Antas ng Kakayahan sa Paggamit ng Pandiwa		
Antas ng Kakayahan	f	%
Pinakamataas na Kakayahan	2	1.2
Mataas na Kakayahan	22	13.3
Katamtamang Kakayahan	53	31.9
Mababang Kakayahan	54	32.5
Pinakamababang Kakayahan	36	21.1
Kabuuan	166	100.0

Sa antas ng kakayahan ng mga mag-aaral sa paggamit ng pang-uri, makikita sa Talahanayan 2 na pinakamalaking bahagdan ng mga mag-aaral ang may Mababa hanggang Katamtamang antas ng kakayahan. Ang kinalabasan ay nangangahulugan ng ibayong pagtuturo ng paggamit ng pang-uri.

#### Talahanayan 2. Kinalabasan ng Antas ng Kakayahan sa Paggamit ng Pang-uri

Antas ng Kakayahan	F	%
Pinakamataas na Kakayahan	3	1.8
Mataas na Kakayahan	26	15.7
Katamtamang Kakayahan	51	30.7
Mababang Kakayahan	43	25.9
Pinakamababang Kakayahan	43	25.9
Kabuuan	166	100.0

#### *Mga Salik sa Kakayahan*

*Wika/Wikaing Ginagamit sa Bahay.* Ayon sa mga datos, makikita na 108 o 65.0 bahagdan ang nagsasalita ng Ninorte –Samarnon sa kanilang bahay; 26 o 15.7 bahagdan ang nagsasalita ng Tagalog; 22 o 13.2 bahagdan ang nagsasalita ng Ingles. Mapapansin na karamihan sa mga kalahok sa pag-aaral ay nagsasalita ng Ninorte – Samarnon sa kanilang bahay. Sa sitwasyong ito, mahihinuha na ang kanilang unang wika ay Ninorte-Samarnon.

*Paboritong Babasahin.* Ayon sa mga datos, 92 o 55.4 na bahagdan ng mga mag-aaral ang nagbabasa ng pahayagan o paborito nilang babasahin ang pahayagan; 21 o 12.7 bahagdan ay nagbabasa ng mga nobela; at 29 o 17.5 bahagdan ay nagbabasa ng mga aklat. Ipinahihiwatig nito na marami sa mga kalahok ay mahilig magbasa ng pahayagan. Mahihinuha ang pahayagan ay isang pangunahing babasahin sa mga pamamahay ng mga mag-aaral.

*Paboritong Panooring Pelikula.* Ayon sa datos, 98 o 59.0 na bahagdan ay nanonood ng mga pelikulang Ingles; 25 o 15.0 bahagdan ang nanonood ng pelikulang Pilipino; 33 o 19.9 na bahagdan ay nanonood ng pelikulang Intsek. Mapapansin na marami sa mga kalahok ang nanonood ng mga pelikulang Ingles. Sa sitwasyong ito, mahihinuha na mas mahilig manood ang mga mag-aaral ng mga pelikulang Ingles kumpara sa sariling atin.

*Paboritong Asignatura.* Ayon sa datos, 3 o 1.8 bahagdan ang nagsabing Filipino ang kanilang paboritong asignatura; 79 o 47.6 na bahagdan ang nagsabing Araling Panlipunan; 26 o 15.7 bahagdan naman sa Ingles at MAPEH ang kanilang paboritong asignatura. Mahihinuha na marami ang gustong mag-aral ng asignaturang Araling Panlipunan.

*Paboritong Leksyon sa Filipino.* Ayon sa datos, 4 o 2.4 na bahagdan ang nagsabing balarila ang kanilang paborito; 150 o 90.4 na bahagdan naman sa leksyong panitikan; at 12 o 7.2 bahagdan ang nagsabi na iba pang leksyon ang gusto nila. Mahihinuha na mas gustong mag-aral ng panitikan ang mga mag-aaral sa Filipino.



*Grado sa Filipino sa Ikatlong Markahan.* Ayon sa datos, 2 o 1.2 na bahagdan ang nakakuha ng gradong 91-95; 54 o 32.4 bahagdan ang nakakuha ng gradong 86-90; 63 o 37.9 bahagdan ang nakakuha ng gradong 81-85; 32 o 19.2 na bahagdan ang nakakuha ng gradong 76-80; samantalang 15 o 9 na bahagdan ang nakakuha ng 75 o mas mababa pang grado. Mapapansin na pinakamalaking bahagdan ng mag-aaral ay nakakuha ng gradong 81-85 hanggang 86-90.

Talahanayan 3. Mga salik sa kakayahan			
Mga Impormasyon		Bilang	Bahagdan
Wika/wikainag ginagamit sa bahay	Abaknon	1	0.6
	Bikolano	1	0.6
	Cebuano	8	4.8
	Ninorte-Samarnon	108	65.0
	Tagalog	26	15.7
	Ingles	22	13.2
Paboritong Babasahing Filipino	Kabuuan	166	100.0
	Pahayagan	92	55.4
	Nobela	21	12.7
	Aklat	29	17.5
	Komiks	11	6.6
	Magazin	8	4.8
	Maikling Kuwento	2	1.2
	Journal	3	1.8
	Kabuuan	166	100.0
	Ingles	98	59.0
Paboritong Panooring Pelikula	Filipino	25	15.0
	Intsek	33	19.0
	Koreano	6	3.6
	Hapones	4	2.4
	Kabuuan	166	100.0
	Filipino	3	1.8
	Araling Panlipunan	79	47.6
	Ingles	26	15.7
	M.A.P.E.H.	26	15.7
	Matematika	12	7.2
Paboritong Asignatura	T.L.E	10	6.0
	Agham	6	3.6
	Kompyuter	1	0.6
	Edukasyong	3	1.8
	Pagpapahalaga		
	Kabuuan	166	100.0
	Balarila	4	2.4
	Panitikan	150	90.4
	Iba Pa	12	7.2
	Kabuuan	166	100.0
Grado sa Filipino	91-95	2	1.2
	86-90	54	32.4
	81-85	63	37.9
	76-80	32	19.2
	75-pababa	15	9.0
	Kabuuan	166	100.0

*Kaugnayan ng mga Salik at ng Kakayahan sa Paggamit ng Pandiwa at Pang-uri*

Ang Talahanayan 4 ay naglalahad ng buod ng kinalabasan ng ugnayan sa pagitan ng mga salik at ng kakayahan sa paggamit ng pandiwa. Ipinapakita ng talahanayan na ang wika o wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, at grado sa ikatlong markahan ay may makabuluhang kaugnayan sa kakayahan ng paggamit ng pandiwa sa mga komposisyong kanilang isinulat. Samantalang ang paboritong leksiyon ay nagpapakita na walang anumang kaugnayan sa paggamit ng pandiwa sa mga isinulat na komposisyon.



**Talahanayan 4. Buod ng Kinalabasan ng Ugnayan sa Pagitan ng mga Salik at Kakayahan sa Paggamit ng Pandiwa**

Mga Salik	F-Ratio	Significant F	Coefficient of Determination	Interpretation
Wika/Wikaing Ginagamit sa Bahay	3.27151	.0723	1.96%	Significant
Paboritong Babasahing Filipino	5.33046	.0220	3.15%	Significant
Paboritong Panooring Pelikula	13.18567	.0004	7.44%	Significant
Paboritong Asignatura	9.45745	.0025	5.45%	Significant
Paboritong Leksyon	0.10830	.7425	0.07%	Not Significant
Grado sa Ikatlong Markahan	59.38088	.0000	26.58%	Significant

Ang Talahanayan 5 ay naglalahad ng buod ng kinalabasan ng ugnayan sa pagitan ng mga salik at ng kakayahan sa paggamit ng pang-uri. Ipinapakita ng talahanayan na ang wika o wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, paboritong leksiyon, at grado sa ikatlong markahan ay may makabuluhang kaugnayan sa kakayahan ng paggamit ng pang-uri sa mga komposisyong kanilang isinulat.

**Talahanayan 5. Buod ng Kinalabasan ng Ugnayan sa Pagitan ng mga Salik at Kakayahan sa Paggamit ng Pang-uri**

Demograpikong Profile	F-Ratio	Significant F	Coefficient of Determination	Interpretation
Wika/Wikaing Ginagamit sa Bahay	6.14873	.0142	3.61%	Significant
Paboritong Babasahing Filipino	11.33173	.0009	6.46%	Significant
Paboritong Panooring Pelikula	16.14993	.0001	8.97%	Significant
Paboritong Asignatura	17.77203	.0000	9.78%	Significant
Paboritong Leksyon	8.39004	.0043	4.87%	Significant
Grado sa Ikatlong Markahan	91.14274	.0000	35.72%	Significant

**Konklusyon**

Kakaunti ang kakayahan ng mga mag-aaral sa paggamit ng pandiwa at katamtaman ang kakayahan ng mga mag-aaral sa paggamit ng pang-uri. Nagpapahiwatig ito na kinakailangang pag-ibayuhin ang pagtuturo ng paggamit ng pandiwa at pang-uri sa mga mag-aaral.

Ang mga kalahok sa pag-aaral ay tubong Hilagang Samar. Mahilig magbasa ng mga pahayagan ang mga kalahok. Mas kinahihiligang panoorin ang mga Ingles na palabas samantalang kinahihiligan naming asinagtura ang Araling Panlipunan. Mas marami ang gusting pag-aralan ang panitikan kaysa sa ibang leksiyon sa Filipino. Karamihan ay may katamtamang taas ng marka sa Filipino.

Sa kalahatan, ang wika o wikaing ginagamit sa bahay, paboritong babasahing Filipino, paboritong panooring pelikula, paboritong asignatura, at grado sa ikatlong markahan ay may makabuluhang kaugnayan sa kakayahan ng paggamit ng pandiwa, at ang paboritong leksyon ay mahahalagang salik sa kasanayan sa paggamit ng pandiwa at pang-uri. Kinakailangang hikayatin ng mga guro na pag-ukulan ng pansin ang mga salik na ito upang mapaunlad ang kakayahan ng mga mag-aaral.

**Rekomendasyon**

Batay sa mga napag-alaman, mga konklusyon at implikasyon, iniharap ang mga sumusunod na rekomendasyon:

1. Kinakailangang bigyan ng pansin ng mga guro sa Filipino ang pagtuturo ng balarila, lalo na ang mga leksiyon tungkol sa pandiwa at pang-uri.
2. Kinakailangang hikayatin ang mga mag-aaral sa pagbabasa ng mga babasahin bukod sa pahayagan na makakatulong sa pagpapaunlad ng kakayahan sa paggamit ng pandiwa at pang-uri.
3. Kinakailangan ding hikayatin ang mga mag-aaral na manood ng mga programang Tagalog o Filipino at panonood ng mga pelikulang Filipino para makatulong sa pagpapalago ng kaalaman sa pagsulat ng komposisyon ng mga mag-aaral.
4. Kinakailangang hikayatin ng mga magulang na pagbutihin ang kakayahan sa paggamit ng pandiwa at pang-uri sa pagsulat ng komposisyon sa pang-araw-araw nilang buhay o gawain.
5. Kinakailangang bigyan ng mga guro sa Filipino ang mga mag-aaral ng mga gawain tulad ng pagsulat ng komposisyon upang mapabuti ang kanilang kakayahan sa paggamit ng pandiwa at pang-uri.



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## **Academic Emotions And Performance In Psychology of College Freshman Students of the University Of Eastern Philippines**

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### **Abstract**

College students experience a variety of emotion-related situations. Many of these situations imply daily hassles relating to teachers, classmates, or learning at home. The emotional state of a learner has the potential to influence his/her thinking. As a subject, which deals with the human mind and its process, Psychology lessons could trigger different emotions that may affect overall performance.

The study determined the level of academic emotions of the students in terms of enjoyment, pride, anger, boredom, anxiety, hope, shame and relief. It also determined the level of performance of the students in Psychology. Moreover, it looked into the significant relationship of academic emotions and performance in the subject. The study involved 387 freshman students enrolled in General Psychology in the first semester of SY 2013-2014. The respondents answered a 96-item academic emotions questionnaire. The performance of the students in Psychology was based on the grades they got in the subject. Statistical tools included frequency counts, percentages, weighted means and multiple regression analysis.

The study found out that the students have a high level of enjoyment, pride, hope, and relief; low level of anger, boredom, and anxiety; and an average level of shame. The respondents had Fair to Good performance in Psychology. Test of relationship revealed that enjoyment, pride and boredom significantly related to academic performance while hope, relief, anger, anxiety and shame did not have significant relationship with performance. The study recommended the active participation in class discussions of students to enhance learning through more classroom activities and instructional strategies.

Key words: academic emotions, psychology, academic performance, college students

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## Introduction

College students experience a variety of emotion-related situations. As a Psychology teacher, the researcher has observed emotion-filled classrooms especially before, during and after examinations. There were also observations of emotions that occur during class discussions or emotions that manifest when students do not learn new concepts or ideas. Perhaps the lack of preparations and other related factors trigger these emotions to come up in these different situations. Academic emotions are various' emotional experiences in connection with students' academic activities in the teaching/learning process. It includes emotional experiences in such activities as classroom learning, homework fulfillment and examination taking. Academic emotions involve all kinds of emotions that students experience in classroom teaching, academic learning, and task-related situations (e.g. enjoyment of learning, pride of success, or test-related anxiety) (Goetz, 2006). Students do experience different levels of positive and negative emotions manifested on their academic performance. Negative emotions like anxiety, anger and boredom seem to be found predominantly in students with poor academic outcomes, whereas students who do well academically experience better levels of overall enjoyment and pride (Meyer and Turner, 2002).

Emotions influence a person's ability to process information and to accurately understand what s/he encounters (Pekrun, 2001). The emotional state of Psychology students has the potential to influence their thinking. As a subject which deals with the human mind and its process, Psychology lessons could trigger different emotions that may affect overall performance. Although emotions have the potential to energize their thinking, emotional states also have the potential to interfere with learning. If students are overly excited or enthusiastic, they might work carelessly or quickly rather than work methodically or carefully. As Schutz (2002) claimed that emotion is closely integrated in virtually every aspect of the teaching and learning process, so it is important that the nature of emotions within the school context be understood. Good academic emotion is not only beneficial to the development of students' cognitive activities and the building of their attitude toward positive learning, but also conducive to the establishment of healthy teacher-student relation and to the development of students' physique and mentality.

## Statement of Objectives/Problem

The study sought to:

1. Determine level of academic emotions of the respondents in terms of enjoyment, pride, anger, boredom, anxiety, hope, shame, and relief;
2. Determine the level of performance of students in Psychology; and
3. Ascertain the significant relation of academic emotions with performance of students in Psychology.

## Methodology

Descriptive correlational research design was used in this study. The independent variables included student's academic emotions in terms of enjoyment, hope, pride, anxiety, boredom, anger and shame while the dependent variable is the performance of students in Psychology. The population in this study involved the freshman and sophomore students in the University of Eastern Philippines taking Psychology subject. A questionnaire on academic emotions was used as the primary tool in gathering data. The level of academic emotions was interpreted as: Very High (4.20 – 5.00), High (4.00 – 4.19), Average (2.60 – 3.39), Low (1.80 – 2.59) and Very Low (1.0 – 1.79). The final rating of the respondents in Psychology was drawn from the official grading sheets and was categorized as: Excellent (1.0), Very Good (1.25 – 1.50), Good (1.75 – 2.25), Fair (2.50 – 2.75) and Poor (3.00 – 5.00). Data gathered were treated statistically using descriptive measures like frequency counts, percentages and means. Relationships of academic emotions and Psychology performance were computed using Multiple Regression Analysis.

## Results And Discussion

### *Level of Academic Emotions of Students*

Table 1 shows the level of enjoyment of students in Psychology class. Generally, the students had a high level of enjoyment in Psychology based on the grand mean of 4.11. Enjoyment was evident on lessons like emotions, on being happy that the student understood the lessons, and on studying hard for a test.



Table 1. Academic Emotion in terms of Enjoyment

Enjoyment	Mean	INT
I look forward to my Psychology class	4.29	VHL
I enjoy the topic about emotions in my Psychology class.	4.44	VHL
The topic on personality that we discuss with in Psychology is exciting that I really enjoy my class.	4.26	VHL
I enjoy my class that I am strongly motivated to participate	3.99	HL
When doing my Psychology homework, I am in a good mood.	4.04	HL
The activities in my Psychology class are so exciting.	3.99	HL
I am happy that I understand the lessons I have in Psychology.	4.27	VHL
I enjoy doing my Psychology homework so much that I am motivated to do extra assignments.	3.79	HL
Because I look forward to getting a good grade, I study hard for the test.	4.20	VHL
I enjoy taking the different type of tests in Psychology.	4.00	HL
I appreciate the test when there are challenging questions.	4.06	HL
I found every question in the test interesting.	4.00	HL
Grand Mean	4.11	HL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 2 shows the level of pride that the students has in Psychology. It shows that generally, the students had a high level of pride towards the subject based from the grand mean of 3.71. The data shows that pride is manifested in the knowledge in Psychology gained by students and in getting consistent high scores in examinations.

Table 2. Academic Emotion in terms of Pride

Pride	Mean	INT
I think I can be proud of my knowledge in Psychology.	4.08	HL
I tell my friends about my contributions to the Psychology class.	3.62	HL
I am proud of the learning I gain from the discussion in Psychology.	4.28	VHL
I am proud that I am able to participate in the class discussion.	3.96	HL
I am very motivated to learn lessons in Psychology because I want my name to be recognized in the class.	3.29	AL
After doing my Psychology homework, I am proud of myself.	3.75	HL
I tell my friends about the new things I learned in Psychology.	3.65	HL
I am proud that I am able to discuss the topic assigned to me.	3.70	HL
I feel great when there are difficult questions in the test.	3.03	AL
I am proud of how well I have done on the Psychology test.	3.60	HL
After taking a test in Psychology, I am proud of myself.	3.56	HL
I feel gratified when I consistently got high scores in the test.	4.04	HL
Mean	3.71	HL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 3 shows the level of anger students manifested towards Psychology. Generally, students had a low level of anger with a grand mean of 2.06. Generally, the students get angry when teachers postpone a test when they feel they are prepared for it, when they cannot memorize important terms and when teachers give difficult questions.

Table 3. Academic Emotion in terms of Anger

Anger	Mean	INT
I am annoyed during my Psychology class.	2.16	LL
I am angry during my Psychology class that I would like to leave.	1.67	VLL
I get angry because the topic on laws of learning is so difficult.	1.90	LL
My Psychology class irritates me.	1.70	VLL
My Psychology homework makes me angry.	1.82	LL
I get angry because my Psychology homework occupies much of my time.	1.85	LL
I am so angry that I would like to throw my homework into the trash.	1.66	VLL
I get angry if I cannot memorize the different terms in the topic about personality.	2.51	LL
I am annoyed that my teacher asks such difficult questions.	2.42	LL



I am angry when my teacher gives examination papers that I would like to tear them into pieces.	1.89	LL
I always hate being pressured by the time when taking the test.	2.33	LL
I am angry when my teacher postpones the test especially when I am prepared for it.	2.84	AL
Mean	2.06	LL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 4 shows the level of boredom the students had in Psychology. Generally, students had a low level of boredom noting that the grand mean was only 1.84. Students show manifestations of low level of boredom as evidenced by their being energetic in their class activities and their concentration in the lessons.

Table 4. Academic Emotion in terms of Boredom

Boredom	Mean	INT
I can't concentrate because I am so bored in my Psychology class.	1.86	LL
I think the topic on sensation is boring.	1.81	LL
I am bored and feel sleepy during class discussion.	1.83	LL
I have no energy in doing class activities.	1.75	VLL
Just thinking of my Psychology homework makes me feel bored.	2.03	LL
I'm so bored that I don't feel like studying anymore.	1.92	LL
I get so bored with Psychology homework	1.81	LL
I am bored of reading text on our topic about intelligence.	1.69	VLL
Mean	1.84	LL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 5 presents the anxiety level of students in psychology. The table show that in general, anxiety level of students in psychology was at a low level with a grand mean of 2.56. It can be gleaned that students appeared to be not scared of their Psychology class, not worried if the lesson was difficult and do not get uneasy with lessons. However, students really worry if they get low-test scores.

Table 5. Academic Emotion in terms of Anxiety

Anxiety	Mean	INT
When thinking about my Psychology class, I get nervous.	2.52	LL
When thinking of our topic on learning and laws of learning, I get uneasy.	2.46	LL
Psychology scares me that I would rather not attend school.	1.76	VLL
I worry if our lesson is too much difficult for me.	2.36	LL
I'm so scared of my Psychology assignments that I would rather not start them.	2.44	LL
I start sweating because I am worried I cannot complete my assignments on time.	2.64	AL
I am tense and nervous in the class.	2.36	LL
I worry if I can completely understand the lesson.	2.77	AL
I am anxious that I rather not take the Psychology test.	2.54	LL
When taking the exam in Psychology, I am tense and nervous.	2.89	AL
When I have an upcoming exam, my stomach is upset.	2.50	LL
When taking the Psychology exam, I worry if I get low scores.	3.43	HL
Mean	2.56	LL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 6 shows the students' level of hope in Psychology. The table presents a grand mean of 4.19, described as high level. This indicates that students were hopeful that they learned from the class discussion and that this will be useful in their other classes, that they will get good grades and that they will be able to understand their teacher's difficult questions in the test.

Table 6. Academic Emotion in terms of Hope

Hope	WM	INT
I keep thinking that I will be able to understand the lesson.	4.10	HL
I keep thinking that I will get good grade in Psychology.	4.22	VHL
I look forward to comprehend my teacher's difficult question.	3.77	HL
I hope that what I have learned from the discussion in Psychology will be useful too in	4.30	VHL



my other subjects.		
I know that I will be able to do my homework.	4.17	HL
I think it is not difficult to learn Psychology lessons if I try to study them.	4.45	VHL
I believe I will have a better future if I will not give up in doing my best to understand the lessons in the class.	4.59	VHL
I hope that what I will gain in my Psychology class will be the foundation of my other learnings.	4.38	VHL
During the exam in Psychology, I feel that I can pass it.	3.90	HL
When I found the test difficult, I don't give up.	4.16	HL
I know that if I have the right attitude towards taking test, my score won't be a failure.	4.00	HL
I am hopeful I will get better scores in the future tests in Psychology.	4.21	VHL
Mean	4.19	HL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 7 presents the grand mean of 2.38 described as average level of academic emotion in terms of shame. This indicates that the students could have shame manifestations depending on the situation that they could be confronted with.

Table 7. Academic Emotion in terms of Shame

Shame	Mean	INT
I blush when I discuss about the laws of learning in my Psychology class.	2.86	AL
When I say about something on the topic about law I feel like embarrassing myself.	2.55	LL
It humiliates me if I could not answer the easy question.	3.10	AL
I feel ashamed if ever I am asked to discuss in front of the class	2.99	AL
When I discuss the homework/assignments with my classmates, I avoid eye contact.	2.72	AL
When I don't understand something in my Psychology homework, I don't want to tell anybody.	2.48	LL
I am embarrassed about my lack of knowledge in Psychology.	2.71	AL
I won't ask my teacher to repeat his/her statement when in case I am not able to get it.	2.67	AL
I start sweating when I feel my performance on the Psychology exam seemed embarrassing.	2.96	AL
After taking the exam in Psychology, I feel ashamed to submit my paper.	2.60	AL
I am ashamed that I cannot answer my teacher's question well.	3.07	AL
I feel embarrassed if I got low scores while everybody is expecting me to get higher scores.	3.28	AL
Mean	2.83	AL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level

Table 8 presents the data about academic emotions in terms of relief. The grand mean of 3.87 is described as high level. Manifestations of relief was manifested in being able to do something commendable in class and being able to finish tasks ahead of time.

Table 8. Academic Emotion in terms of Relief

Relief	Mean	INT
I am thankful every after class discussion in Psychology.	4.00	HL
I feel gratified when my teacher gives me the opportunity to share my ideas in the class.	4.00	HL
I feel relaxed when I have done something commendable in the class.	4.22	VHL
I am relieved after I have performed oral exam in Psychology.	3.94	HL
I am thankful of the opportunity that I have studied Psychology.	4.36	VHL
I feel comfortable if I finish my homework/assignments ahead of time.	4.36	VHL
I am contented of the lessons learned from the topics discussed in class.	4.01	HL
I am relieved that I am able to memorize well the structure of the human brain.	3.78	HL
I am satisfied of my scores in the test.	3.45	HL
I feel contented that my performance in the class was tested.	3.65	HL
Failed or not, I am happy that I have taken the test.	3.59	HL
I am relieved when the teacher postpones the test.	3.03	AL
Grand Mean	3.87	HL

VHL-Very High Level; HL-High Level; AL-Average Level; LL-Low Level; VLL-Very Low Level



### *Students' Performance in Psychology*

Table 9 shows the students' performance in Psychology. It shows that 119 or 30.75 percent performed fairly, 118 or 30.49 percent performed good, 58 or 14.99 percent performed very good, and 3 or 0.78 percent performed excellently in Psychology. There were only 89 or 23 percent of students who got the lowest passing grade. Generally, Psychology students were average achievers. Considering that the student-respondents were mostly first year students their grades can already be considered as good enough to benchmark for other challenging subjects for the next year level.

Table 9. Performance of Students in Psychology

PERFORMANCE LEVEL	Frequency	Percent
Excellent	3	0.78
Very Good	58	14.99
Good	118	30.49
Fair	119	30.75
Poor	89	23.00
Total	387	100.00

### *Relationship of Academic Emotions and Performance in Psychology*

To test the influence of academic emotions to performance in Psychology, the multiple regression analysis was employed. Overall relationship shown in Table 10 resulted to an R-value of 0.527 which is considered moderate relationship. The R-square value of 0.278 means that 27.8 percent of the variance in Psychology performance could be attributed to the academic emotions of the respondents. Result of the Analysis of Variance (ANOVA) showed an F-value of 8.976 with a significance value of 0.045 which is less than the 0.05 margin of error level. The null hypothesis therefore is rejected which means that there is a statistically significant relationship between emotions and Psychology performance. Looking however at coefficients, only enjoyment ( $\beta = 0.359$ ,  $\alpha = 0.024$ ), pride ( $\beta = 0.254$ ,  $\alpha = 0.049$ ), and boredom ( $\beta = -0.281$ ,  $\alpha = 0.039$ ) significantly predicted Psychology performance of the students. Anger, anxiety, hope, shame, and relief did not significantly predict the dependent variable having significant values all greater than the 0.05 margin. Findings on enjoyment significantly predicting performance in Psychology show the importance of this particular emotion in the learning process. Academic emotions influence the academic performance of the students, which means that a positive attitude towards the subject contributes well to the learners' performance (Schutz and Pekrun, 2007).

The positive magnitude of the beta means that students with high manifestation of this emotion generally resulted to higher performance in the subject. On the other hand, lower manifestation on this emotion generally resulted to lower performance in the subject. Similarly, pride significantly predicting Psychology performance shows that students who were proud or took pride in learning the subject had higher grades compared to students who had low manifestations on this emotion. Perhaps, students with high self-esteem were the ones who have shown high degree of pride resulting to better performance in the subject. On the other hand, boredom significantly predicting Psychology performance means that a significant number of students manifest this type of emotion. The effect however of this emotion is negative which means that students with higher manifestation on this had lower performance in the subject. On the contrary, students who manifested low in boredom had higher grades. Other emotions not showing significant relationship with performance in Psychology mean that the students did not feel these emotions toward the subject. If ever some have manifested these emotions, it was to a lower degree resulting to a lesser effect on their performance in the subject.

Table 10. Stepwise Multiple Regression Analysis between Academic Emotions and Performance in Psychology

Academic Emotions	Beta	Sig.	Interpretation
ENJOYMENT	0.359	0.024	Significant
PRIDE	0.254	0.049	Significant
ANGER	-0.077	0.274	Not Significant
BOREDOM	-0.281	0.039	Significant
ANXIETY	0.055	0.362	Not Significant
HOPE	-0.011	0.864	Not Significant
SHAME	0.039	0.486	Not Significant
RELIEF	0.086	0.192	Not Significant





R-Square	0.278
Adjusted R-Square	0.132
F-Ratio	8.976*
p-value	0.045

\* = Significant at .05 level ( $p < .05$ )

\*\* = Significant at .01 level ( $p < .01$ )

ns = Not Significant at .05 level ( $p > .05$ )

## Conclusions

The study concludes that academic emotion is a significant factor in the achievement of students in school. Academic emotions are high in terms of enjoyment, pride, hope and relief. Anger, boredom and anxiety are at a low level while shame was felt moderately. The respondents enjoy their classroom activities and are contented and satisfied with their lessons introduced by their professors. While the students' average performance could be acceptable, there is still a wide room for the students to achieve more. This will be made possible only if teachers are to improve their teaching methodologies, strategies and techniques. It is noted that anything novel is shown or brought to class by the teacher brings forth a new impetus for the learners. Above all, it is not to be forgotten that the teacher is the best teaching aid. Learning has always to be with a "human touch". This necessarily tells that teachers have to be presentable and must exude an aura, which could get the learners motivated and interested. If and when teachers are presentable and exude aura, they are able to command some amount of respect, command and cooperation among the learners.

## Recommendations

Based on the conclusions drawn, the following recommendations were arrived at:

1. Psychology teachers should use strategies, which will enhance the enjoyment of students in learning the subject.
2. It is recommended that teachers should design teaching-learning tasks, which will challenge learners. These challenges would usually bring about what are yet to be discovered from them. This would lessen boredom in the class, at best.
3. Further research should be conducted along academic emotions linking to student personalities.

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## **Performance Of Senior Teacher Education Students In A Pre-Licensure Test For General Education**

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### **Abstract**

The Licensure Examination for Teachers (LET) cover General Education and Professional Education components for the Elementary level examination and the General Education, Professional Education and Specialization components for the Secondary level examination.

The study developed a 100-item pre-licensure test on the General Education component of the Teacher Education curriculum. The study looked into the performance of the students in the examination per subject area. It also looked into the discrimination and difficulty indices to assess the validity and reliability of the items as instruments to measure achievement.

The respondents covered all students who took the examination. The study used the descriptive – evaluative design. The performance of the students was measured through the percentage of students who got the correct answer. The data were treated statistically using means, percentages and ranking. Item analysis was done to determine the indices of difficulty and discrimination while Kuder Richardson 21 was computed to determine the reliability of the test.

The examinees registered a High performance. The highest performance of the respondents was in the Filipino component while the least performance is in Science. Easiest items per percentage of correct responses were in Filipino and Social Science while the most difficult item is in Science. Close to half of the items are of moderate difficulty. Only few items have satisfactory discrimination.

The study recommended the improvement of the test particularly on the choices to improve the reliability of the test. Learning areas where students performed poorly should be given focus in the teaching of the general education subjects.

**Key words:** performance, senior teacher education students, pre-licensure test, and general education

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## Introduction

CHED Memo Order 30 s of 2004 lays the framework of the curriculum of Teacher Education. The said memorandum spells out that the curriculum is divided into a General Education and Professional Education components for the Bachelor of Elementary Education program and General Education, Professional Education and Specialization for the Bachelor of Secondary Education program. Hence, the curriculum provided a total of 63 units for General Education subjects which include among others, English, Mathematics, Filipino, Sciences and Social Studies.

General education exposes students to various domains of knowledge and ways of comprehending social and natural realities, developing in the process intellectual competencies, personal and civic capacities and practical responsibilities. General education is oriented toward broader or wide-ranging understandings.

As such, part of the table of specifications of the PRC Licensure Examination for Teachers (LET) is a General Education test. Montemayor (2009) identified the importance of achieving well in General Education in college as it is a correlate of success in the LET. The same finding was observed by Hena, et al (2011) when the study stated that the college grade point average is related to the General Education performance in the LET. However, common remarks of past examinees point out to the difficulty of the component in the actual LET. A preliminary analysis of the case points out to the seemingly difficulty in the general education items which cover a whole wide range of competencies which may be distinct from each other, unlike the professional education subjects which could be overlapping and interdisciplinary.

As part of the efforts of the College of Education of the University of Eastern Philippines to improve the passing percentage of the Licensure Examination for Teachers, it included in the curriculum a subject which deals with review of LET competencies. In this subject, focus is also given to the preparation of test questions which could characterize or simulate the types of test items given in the LET.

## Statement Of Objectives/Problem

The study sought to:

1. Develop a 100-item pre-licensure test on the General Education component of the Teacher Education curriculum;
2. Look into the performance of the students in the examination per subject area; and
3. Find the discrimination and difficulty indices of the items.

## Methodology

The respondents of the study comprise senior students of the College of Education who are enrolled in a Built-in LET Review. The study used the descriptive – evaluative design. The performance of the students was measured through the percentage of students who got the correct answer. This means that the higher is the percentage of students getting the correct answer in an item, the better is the performance and the easier is the item. The data were treated statistically using means, percentages and ranking. Item analysis was done to determine the indices of difficulty and discrimination.

## Results And Discussion

### *The Developed Test*

Following the table of specification of the Professional Regulation Commission, a 100-item General Education test covering English, Filipino, Science, Social Science and Mathematics, was developed. Twenty items were prepared for every sub-component of General Education.

### *Performance in the English Sub-component*

Generally, the students had a High performance in English. Table 1 shows that in the English sub-component of the test, the students had Very High performance in nine (9) items, High performance in seven (7) items, Average performance in one (1) item, Low performance in two (2) items and Very Low performance in one (1) item. While the item where students had the highest performance is in getting the meaning of an idiomatic expression, the lowest performance, however, is in getting the meaning of given sentences. This shows that students had difficulty in reading between the lines, i.e., getting the meaning behind the sentences. The most difficult item is



“getting the meaning of the father being a principal bread winner.” The students could have confused bread with just only budget, not taking note that it means more of the economic support. The easiest item is to determine the meaning of “all ears.” The meaning was easily got through context clues.

Table 1. Percentage of Correct Responses for the English Sub-component

Item	Competency	Percentage of Correct Responses	Level of Performance	Rank
16	Meaning of an idiomatic expression	96.99	Very High	1
12	Vocabulary	94.31	Very High	2
2	Example of a figure of speech	93.65	Very High	3.5
10	Appropriate expression	93.65	Very High	3.5
3	Correcting grammatical error	91.64	Very High	5
19	Meaning of a phrase	90.97	Very High	6
5	Vocabulary	89.63	Very High	7
11	Meaning of a sentence	84.95	Very High	8
6	Meaning of an idiomatic expression	81.27	Very High	9
17	Appropriate phrase/spelling	77.59	High	10
15	Meaning of a sentence	73.24	High	11
9	Correct usage of phrase	71.91	High	12
13	Proper usage of pronoun	69.23	High	13
18	Meaning of idiomatic expression	68.56	High	14
14	Meaning of a sentence	67.89	High	15
8	Correct usage of terms	62.88	High	16
1	Meaning of an idiomatic expression	42.47	Average	17
20	Correct form of the verb	40.13	Low	18
7	Meaning of a sentence	29.77	Low	19
4	Meaning of a sentence	11.71	Very Low	20
	Grand Mean	71.62	High	

#### Performance in the Filipino Sub-component

Generally, the students had a High performance in Filipino. The Filipino sub-component registered the highest performance among the five sub-components. The item having the highest performance is the same item with the highest percentage of students getting the correct answer in the entire test. Table 2 shows that in the Filipino sub-component of the test, the students had Very High performance in fourteen (14) items, Average performance in three (3) items, Low performance in two (2) items and Very Low performance in one (1) item. The students had the highest performance in getting the meaning of idiomatic expressions. However, the lowest performance is in “*pagbabagong morpoponemiko*”, “*pokus ng pandiwa*” and “*uri ng pangungusap na walang paksa*”. These topics are all about Filipino grammar. The most difficult item is to “determine the kind of sentence without a subject.” The students could have just forget the term for the sentence. The easiest item is to determine the meaning of the idiomatic phrase “agaw-buhay” which seems to be a very common idiom.

Table 2. Percentage of Correct Responses for the Filipino Sub-component

Item	Competency	Percentage of Correct Responses	Level of Performance	Rank
33	Kahulugan ng idyomatikong pahayag	97.99	Very High	1
31	Kahulugan ng idyomatikong pahayag	96.99	Very High	2.5
34	Kahulugan ng idyomatikong pahayag	96.99	Very High	2.5
27	Kahulugan ng idyomatikong pahayag	96.66	Very High	4
24	Ang aral sa salawikain	96.32	Very High	5
22	Tamang gamit ng pang-uri	94.98	Very High	6
35	Gawi ng komunikasyon	92.98	Very High	7
30	Wastong pahayag	92.31	Very High	8
28	Tamang ayos ng pangungusap	90.64	Very High	9
23	Kahulugan ng idyomatikong pahayag	89.63	Very High	10
25	Kahulugan ng idyomatikong pahayag	89.30	Very High	11
26	Kahulugan ng pangungusap	88.63	Very High	12
32	Kahulugan ng idyomatikong pahayag	86.29	Very High	13



21	Pagtukoy ng tayutay	82.94	Very High	14
29	Talasalitaan	60.20	Average	15
39	Pinakataamang pangungusap	58.86	Average	16
38	Tamang baybay ng salita	43.14	Average	17
40	Uri ng pagbabagong morpoponemiko	39.13	Low	18
36	Pokus ng pandiwa	35.45	Low	19
37	Uri ng pangungusap na walang paksa	18.73	Very Low	20
	Grand Mean	77.41	High	

#### *Performance in the Science Sub-component*

Generally, the students had an Average performance in Science. The Science sub-component registered the lowest average performance based on percentage of correct responses, with a little more than half of the respondents getting the answers correct. Table 3 shows that in the Science sub-component of the test, the students had Very High performance in eight (8) items, High performance in three (3), Average performance in three (3) items, Low performance in two (2) items and Very Low performance in four (4) items. The students had the highest performance in application of scientific principles. However, the lowest performance are about “atomic structure”, “use of scientific instruments” and “explanation of an astronomy principle”. The item with the lowest performance of students is also the lowest performance in the whole test. The most difficult item was to “explain why the sun rise in the east and set in the west.” The students could have been confused on the direction of the rotation of the earth which caused the phenomenon. The easiest item was on “prevention of rabies.” This could have been an easy item because rabies prevention is a well-publicized advocacy.

Table 3. Percentage of Correct Responses for the Science Sub-component

Item	Competency	Percentage of Correct Responses	Level of Performance	Rank
47	Prevention of rabies	97.66	Very High	1
58	Law of motion	92.64	Very High	2
60	Application of scientific principle	91.64	Very High	3
42	Characteristic of scientists	89.30	Very High	4
45	Condition for dengue as an epidemic	87.96	Very High	5
46	When campaign for dengue is effective	85.62	Very High	6
54	Form of energy	82.61	Very High	7
44	Identifying superstitious belief	80.60	Very High	8
57	Scientific terminology	79.26	High	9
41	Characteristic of scientists	68.23	High	10
51	Scientific terminology	62.21	High	11
50	Explanation of copper as electrical wiring	58.53	Average	12
55	Scientific terminology	57.19	Average	13
59	Application of scientific principle	54.85	Average	14
43	Step of the scientific method	33.11	Low	15
56	Structure of the digestive system	20.74	Low	16
48	Atomic structure	15.38	Very Low	17
53	Use of a scientific instrument	13.71	Very Low	18
52	Use of a scientific instrument	6.02	Very Low	19
49	Explanation of an astronomy principle	5.02	Very Low	20
	Grand Mean	59.11	Average	

#### *Performance in the Mathematics Sub-component*

Generally, the students had a High performance in Mathematics. Table 4 shows that in the Math sub-component of the test, the students had Very High performance in seven (7) items, High performance in six (6) items, Average performance in four (4) items, Low performance in two (2) items and Very Low performance in one (1) item. The students had the highest performance in application of math concepts in word problems. However, the lowest performance are about “measure of time” and “application of percentage” and “application of division of whole numbers”. This indicates that students know how to apply concepts in word problems, however, there is a tendency that some word problems may also be misconceptualized. The most difficult item is a simple division problem which asked of the number of “round trip tickets” using a certain amount. Many were confused perhaps because they just divided and failed to take note that a round trip ticket is a ticket multiplied by two. The easiest



item was “subtracting the two given temperatures”.

Table 4. Percentage of Correct Responses for the Mathematics Sub-component

Item	Competency	Percentage of Correct Responses	Level of Performance	Rank
79	Application of subtraction of integers	89.30	Very High	1
71	Application of proportion	87.29	Very High	2
74	Application of subtraction of whole numbers	86.96	Very High	3
62	Application of combination in a problem	85.28	Very High	4
68	Application of perimeter	84.28	Very High	5
66	Application of perimeter	83.95	Very High	6
61	Example of a leap year	82.94	Very High	7
73	Application of proportion	78.93	High	8
78	Concept of fraction	77.93	High	9
67	Application of perimeter	76.59	High	10
64	Finding median	75.59	High	11
65	Correspondence in functions	74.25	High	12
76	Evaluation of algebraic expression	64.21	High	13
70	Finding range	52.51	Average	14
75	Average	51.17	Average	15
63	Application of proportion	45.82	Average	16.5
77	Number problem	45.82	Average	16.5
69	Measure of time	38.46	Low	18
80	Application of percentage	36.45	Low	19
72	Application of division of whole numbers	13.71	Very Low	20
	Grand Mean	66.57	High	

#### *Performance in the Social Science Sub-component*

Generally, the students had a High performance in Social Science. Table 5 shows that in the Social Science sub-component of the test, the students had Very High performance in nine (9) items, High performance in two (2) items, Average performance in four (4) items, Low performance in five (5) items. There was no Very Low performance in this sub-component. The students had the highest performance in items about terms in social science. However, the lowest performance are also on items which entails terms in social science. This indicates that students may have the tendency to forget terms in social science. The item having the lowest percentage of students who got the correct answer asked about the “republic established by Macario Sakay”. This could be a difficult item in as much as this calls for recall of a term in history. The easiest item is the “official title of the National Anthem.” This is a very basic question that is learned since elementary.

Table 5. Percentage of Correct Responses for the Social Science Sub-component

Item	Competency	Percentage of Correct Responses	Level of Performance	Rank
97	Official title of National Anthem	97.99	Very High	1
87	Relation of peso with dollar	95.99	Very High	2
100	Term for a dance	92.98	Very High	3
93	Values inculcation	92.64	Very High	4
89	Characteristic of Philippines as an archipelago	91.64	Very High	5
98	Ideals of Rizal	89.30	Very High	6
91	Values inculcation	85.28	Very High	7
81	Source of objectives of education	81.94	Very High	8
92	Computer parts	81.27	Very High	9
90	Bill of rights	79.93	High	10
96	Bill of rights	69.90	High	11
94	Computer term	57.53	Average	12
88	Why OFW are modern day heroes	52.51	Average	13
99	Taxation concept	49.50	Average	14
83	Achievement of a Filipino hero	43.48	Average	15
86	Achievement of a Philippine president	31.77	Low	16





82	Constitutional provision	30.10	Low	17
84	Importance of voyage of Magellan	29.43	Low	18
95	Bill of rights	29.10	Low	19
85	Historical term	26.42	Low	20
	Grand Mean	65.44	High	

#### *Item Difficulty and Discrimination*

Table 6 shows that the bulk of the items are from moderate to somewhat easy and too easy. This indicates that in general, the items were easy. This could be attributed to a big number of items answered correctly by a big number of students.

Table 6. Item Difficulty of the General Education Test

Item Difficulty	f	%
Too Difficult	7	7.00
Somewhat Difficult	4	4.00
Moderate	44	44.00
Somewhat Easy	21	21.00
Too Easy	24	24.00
Total	100	100.00

Table 7 shows that only few items have satisfactory to high discrimination. Majority of the items have very low discrimination. The items could not discriminate the high performers with the low performers. This could be attributed to the items where a very big percentage of students got the correct answer.

Table 7. Item Discrimination of the General Education Test

Item Discrimination	f	%
High	3	3.00
Satisfactory	28	28.00
Low	7	7.00
Very Low	62	62.00
Total	100	100.00

## Conclusions

Generally, the performance of the students in the examination is satisfactory. However, there is a need to improve the performance by focusing on the topics/learning areas which got a very low percentage of students getting the correct answer. The developed test needs more improvement for the test to really measure the anticipated performance of the students in the LET. A closer look could be done on the distracters in the items.

## Recommendations

Based on the findings, the study forwards the following recommendations:

1. Learning areas where students performed poorly should be given focus in the teaching of the general education subjects.
2. The test should be improved particularly on the choices to improve the reliability of the test.
3. Other studies correlating the scores in the simulated test to the scores of the actual examination should be conducted.



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## **The Relationship Of Elementary Pupils' Final Test Score And Their Conduct Grades In School Of Saint Anthony, Quezon City**

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### **Abstract**

The purpose of this research is to determine the relationship of the Elementary pupils' final test score in CL/GMRC and their conduct grades. This study was conducted to 941 Elementary pupils of the School of Saint Anthony with ages ranging from 6 to 13 years old.

This research is quantitative in nature and used the descriptive design. Frequency, percentage, means and Pearson r correlation served as the statistical tools of the study.

The gathered means displayed that the elementary girls obtained higher scores in their final written exams and conduct grades than the boys. This is apparent across all grade school levels based on the computed means. The collected data present that most of the girls seemed to be more concerned with their grades and conscious with their school behavior compared to the boys.

Weak positive relationships between the final written scores and conduct grades were determined based on the computed Pearson r in each grade level. Grade 1 obtained a person r of .176, grade 2 got an r of .294, grade 4 gained an r of .24, grade 5 obtained an r of .23 and grade 6 gained an r of .28. A moderate positive relationship, on the other hand, was calculated for the grade 3 level (.362).

It can be derived from these findings that conduct grades in the Elementary levels may serve as a potential variable for the grade school pupils to achieve higher academic grades, particularly in the grade 3 level which is the transition level from lower school to middle school. Teachers, parents and other adults in the lives of the Elementary pupils play important roles in imbibing to the children the importance of being well disciplined in class to attain higher scores during exams.

**Keywords:** Conduct Grade, Elementary Pupils, School of Saint Anthony, Final Test Score

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## Introduction

In a classroom set-up, some teachers would assume that pupils who are well behaved in class often get high scores in their exams because they happen to be attentive during class discussions. Wentzel's (2004) research emphasized that social conduct is significantly related to the academic performance of Middle School students.

Aside from teaching the words of God, the CL/GMRC teachers are also responsible for motivating their pupils to behave at all times since they need to reinforce the positive values development of their pupils. Thus, the CL/GMRC Department finds it pioneering to determine if the conduct grades of the Elementary pupils are related to their written assessments.

The CL/GMRC teachers would like to determine the coherence and relevance of gaining a high academic and behavior performance in school. This is to determine whether the high academic status of pupils influence their behavior in school.

Moreover, high academic expectations and level of student-to-student interaction in classroom instructions (such as student-led discussion) appear to have had a negative influence on perceived academic competence level. Akey (2006) explained that because of the know societal standards and perception that a student who has a high academic status must be independent and self-sufficient in terms of the students scholastics needs tends not to mind the behavior to other students and individuals.

For academic progression, better emotional wellbeing is a key factor in primary school, whereas low levels of troublesome behavior and more school engagement emerge as significant in adolescence. Gutman & Vorhaus(2012). The teachers in cooperation with the family, academe, school staff and students to contribute to the development of the wellbeing of an individual helping every person become better in terms of academics and conduct.

## Statement of the Problem:

This study would dwell on the relationship of the conduct grades of the elementary pupils and written performance. This research attempts to find answers in the following questions:

1. What is the profile of conduct grades of the pupils in each grade level?
2. What is the profile of the final written performance of the pupils in each grade level?
3. What is the relationship of the conduct grades of the elementary pupils and their written performance?

## Methodology

### *Research Design*

The researchers used the descriptive design in the form of survey when gathering the data. Data were gathered based on the Final academic and conduct grades given by the Elementary teachers to their pupils.

### *Participants of the Study*

The participants of the study were the grade school students of the School of Saint Anthony from levels 1 to 6. There were 148 students from grade 1, 160 students in grade 2, 147 students in grade 3, 167 students in grade 4, 144 students in grade 5 and 175 students in grade 6. Table 1 presents the frequency distribution of the participants per grade level.

Table 1. Distribution of Participants per grade level

Grade Level	Number of Participants
Grade 1	148
Grade 2	160
Grade 3	147
Grade 4	167
Grade 5	144
Grade 6	175
Total	941 students



Table 1 shows the number of participants in all Grade Levels from Level One (1) to Level Six (6) of The School of Saint Anthony with a total of 941 students for school year 2013-2014. The Level Three (3) has the smallest number of participants and Level Six (6) has the highest number of participants.

#### *Research Instruments*

The instruments used in the study were the academic and conduct grades of the pupils gathered from the encoded grades of the teachers in the computer program of the school.

#### *Data Gathering Procedure*

The CL/GMRC Department conducted a meeting to brainstorm about the implementation of a research about the relationship of the academic and conduct grades of the Elementary pupils. After the encoding of grades, the scores of the pupils were gathered, and compared.

#### *Data Analysis*

The data obtained on this study were analyzed using the excel program. Pearson r was used to determine the relationship of the academic and conduct grades of the pupils. Then, mean computation was applied to compare the academic and conduct grades of the pupils per level and by gender.

### **Results and Discussion**

Table 2. Relationship of Academic and Conduct Grades

Grade Level	Pearson r result
Grade 1	.176
Grade 2	.294
Grade 3	.36
Grade 4	.239
Grade 5	.22
Grade 6	.28

.30- .39- moderate positive relationship

.20- .29- weak positive relationship

.01-.10- no relationship

Table 2 shows that in the research that we have conducted, the researchers acquired the following data that indicates the following: The Grade 3 level has the highest rating which is .36 in the survey questions, while the lowest is the Grade 1 Level in which they got the value of .176. This shows that at the age of 9-10 years old they are already aware of the relevance of obtaining a high Academic and Conduct Grades in their card unlike the Grade 1 in which can be assumed to prioritize play most of the time.

Table 3. Mean Comparison for Academic and Conduct Grades per level

Grade level	Academic Grades		Conduct Grades		Average Academic	Average Conduct
	Male	Female	Male	Female		
1	98.09	98.316	90.92	92.368	98.21	91.65
2	93	94.42	91.29	92.96	93.42	91.99
3	91.63	92.25	89.88	92.89	91.93	91.14
4	85.19	91.18	89.39	85.7	85.42	90.18
5	85.29	86.12	89.37	91.53	85.70	90.40
6	88.93	90.62	88.43	88.90	89.69	89.69

Table 3 shows the mean difference of the Male and Female in terms of the relationship of their Academic and Conduct Grades and their averages per grade level. Level one (1) has the highest obtained academic average and level four (4) as the lowest. In terms of conduct grades the highest was obtained by level two (2) and the lowest by level six (6). Table 3 shows that as the grade level of the pupils goes up, the averages for academic and conduct grades decrease. This implies that the interest of the students varies and concepts of learning, as well as, behavior changes because of their growth and development. Bukatko (2012) explains that children in the



elementary school years are working hard at being responsible. It can be assumed that children in the lower years display more favorable behavior in school than children in the middle school since they may get easily satisfied from the recognitions they receive from their parents and other significant adults in their lives.

Furthermore, it can be gleaned from the data that most of the females gained higher academic and conduct grades than the males in most Elementary grade levels. This reveals how females in the Elementary years focus more in their studies compared to boys, and how well they behave in class than the boys.

### **Conclusions**

The researchers have concluded that the conduct grades of the pupils tend to decrease as pupils mature as represented in levels two to four, and five to six. Several factors could serve as indicators that affected the conduct performance of the children, one of which could be the recognitions younger pupils receive from their parents and teachers. They tend to appreciate simple recognitions than older pupils. The researchers also found out that the profile of the final written performance of the pupils in each grade level is high but varies in every level. Higher grades are gleaned likewise from the pupils in the lower school than the middle school pupils indicating how the younger pupils are more guided in their studies, or possible factor could also be the degree of difficulty of the subject matter.

The researchers found out that the relationship of the conduct grades of the elementary pupils and their written performance have a weak correlation because of the different factors and priorities of the students in each grade level.

### **Recommendations**

The researchers would like to recommend the following to make the students' academic and conduct grade significantly correlated:

Significant adults in the lives of the pupils may prioritize student's emotional needs in such a way that they will have to allot more quality time for their children making them feel important.

Children should be ensured that they will have to socialize and develop a keen sense of fellowship and camaraderie with their classmates or fellow students.

Teaching approaches in school should be more holistic and properly applied that will make the students develop their skill in the multidisciplinary way, enrich their skills and develop curiosity.

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## **Level of Implementation of Guidance Programs in National High Schools of Northern Samar**

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### **Abstract**

The Department of Education by virtue of DepEd Memo 424 series of 2007 recognizes guidance counselors and the implementation of Career Guidance Programs in public secondary schools. In relation to this, every school should have a carefully planned, organized, well-written, and expertly implemented guidance program. These guidance p services must be functional and generally should not be separated from each other.

The study looked into the level of implementation of the guidance programs of national high schools in Northern Samar in terms of individual inventory services, information services, counseling services, in school placement and in-school follow-up. The study also identified problems encountered in the implementation of the guidance services. The main respondents of the study are the guidance counselors of the schools. To validate the claims, school administrators, teachers, and students answered the evaluation questionnaire. Eleven national high schools participated in the study. Statistical tools included frequency counts, percentages, weighted means.

Of the five services, individual inventory services, information services, and counseling services were rated "implemented" while in-school placement and in-school follow-up were rated "much implemented". Problems on the lack of guidance counselors assigned in some schools, "lack of funds" and "no adequate orientation on administrators and teachers regarding the function of guidance "were considered "serious" problems.

The study recommended the hiring of full-time guidance counselors in schools, an orientation of the administrators and teachers on the importance of guidance in high school, and the financial support of the administrators on the services related to guidance.

**Keywords:** guidance programs, implementation, national high schools

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## Introduction

Human growth and development is the topmost concern of the people. It is seen as the sum total of helping purposefully created and contrived to facilitate or show the way for realizing optimum human growth and development of all learners (Mina, 2005). People cannot realize the change to growth and development if there is no guidance and there will be no education if there is no guidance (Padolina and Sanchez, 2003). Based on experiences and observations, one of the top problems pressing on the society is unemployment; hence the great mismatch between the graduates and the institutions. To move towards economic progress individuals have to be in places and conditions where they can contribute to such progress (Cinco, 2007). To lessen and or eradicate this problem, a guidance program puts greater emphasis on the need for a more organized and systematic program (Kapunan, 1974). The program is preventive, developmental and humanistic in nature. As such, year level programs are based on development, personal, social, and educational and career needs. The assumptions are that the students are helped in the following areas: adjustment to college life; gaining deeper self-knowledge and understanding; identifying and enhancing personal and social skills; going through educational and career planning; and implementing career goals. All programs are coordinated by the guidance director and implemented by professional year level counselor (The Columbia Encyclopedia, 2008).

Fundamentally, particularly in the secondary level, there is a great need of guidance and counseling not only because the students are immature but also because they are faced with the task of making decisions concerning the future, some of which may well be irreversible. They are passing through the process of growth and development that involve the unfolding and expansion of powers and capacities, changes, both structural and functional, and adjustment of mental, moral, social, and emotional nature. Throughout the process of growth and development, the child needs guidance and direction in order that he/she may better understand himself/herself and his/her problem, may learn problem-solving methods, and may attain effective self-direction (Mendoza, 2003).

The safety and progress of our society demand each person to contribute to the welfare of others and his/her community (Evangelista, 2001). The individual should be in an occupation or profession for which he/she should be trained and prepared, and he/she can make society a better place to live in. Moreover, the individual should find a way in the society where he/she can make efficient as of the powers and abilities he/she has acquired and developed through education. Guidance program must be properly implemented and supervised for the attainment of these goals.

The Department of Education by the virtue of the DepEd Memorandum No. 424 series of 2007 recognizes the guidance counselors and the implementation of Career Guidance Programs in the public secondary schools. The Career Guidance Program (CGP) is an improved output from the workshop participated in by the guidance/values supervisors and guidance counselors from public national high school, and conducted by the National Education Testing and Research Center (NETRC). In relation to this, every school should have a carefully planned, organized, well-written, and expertly implemented guidance program. The guidance program should include, among other things, the rationale, guiding philosophy and principles, goals, services to be offered, the roles of the guidance personnel, organizational chart, and an action program. (Aquino and Miranda, 2003). Guidance services must be functional and generally should not be separated from each other.

## Statement Of Objectives/Problem

The study aimed to:

1. Determine the level of implementation of the guidance program in the national high schools in the Division of Northern Samar in terms of individual inventory services, information services, counseling service, in-school placement, and in-school follow-up; and
2. Determine the problems encountered in the implementation of the guidance services in the national high schools.

## Methodology

The study was conducted in the eleven (11) national high schools in the Central Area of Northern Samar. The respondents of this study were composed of four groups: guidance counselors, principals/administrators, secondary classroom teachers handling fourth year classes, and fourth year high school students. The respondents answered a questionnaire on the level of implementation of the guidance program in their school. The level of implementation derived from the means was categorized as fully implemented (4.20-5.00), Much implemented (3.40-4.19), Implemented (2.60-3.39), Rarely implemented (1.80-2.59) and Not implemented (1.00-1.79). The problems encountered in the implementation of the guidance program were categorized as Very serious (4.20 – 5.00), Much serious (3.40 – 4.19), Serious (2.60 – 3.39), Less serious (1.80 – 2.59) and Not serious (1.00 – 1.79). The data were statistically treated using frequency counts, percentages, means and ranking.

## Results And Discussion

### Individual Inventory

Table 1a presents the perception of the respondents on the level of implementation of the guidance program in terms of individual inventory service. The service as a whole was found out to be “implemented” having a grand mean of 3.3. Highest mean of 3.7 corresponded to the item that guidance program “helps the individual understand themselves and grow in rational decision-making”. This indicates that guidance counselors and/or advisers recognize the real meaning of guidance, which is directed to helping the learners. Lowest means of 2.9, though still rated Implemented, are on “active involvement of school personnel such as the psychometrician, guidance head; guidance counselor, class adviser, school physician in the guidance program/activities” and “guidance psychological test are administered, scored and interpreted by qualified and trained guidance personnel and psychometric-psychological testing”. This means that though these services exist, there is a need to look into ways of improving the service.

Table 1a. Level of Implementation of the Guidance Program in terms of Individual Inventory Service

Indicator	Mean	Interpretation
Helps the individuals understand themselves and grow in rational decision-making.	3.7	Much Implemented
Helps parents, teachers, counselors and administrators understand the learners for healthy growth and development.	3.4	Much Implemented
Information about the students such as home, family background, physical and medical in formations is presents and recorded properly.	3.2	Much Implemented
Scholastic progress, interview reports with students, and co-curricular activities participated by the students are available	3.4	Much Implemented
Record for psychological test taken by the students such as mental ability/intelligence tests; interest and aptitude; personality test; problem inventory test; attitude test; and sociometric test.	3.3	Implemented
Active involvement of school personnel such the psychometrician, guidance counselor, class adviser, school physician in the guidance program/ activities.	2.9	Implemented
Guidance psychological test are administered, scored and interpreted by qualified and trained guidance personnel on psychometric psychological testing.	2.9	Implemented
Student's cumulative as well as other school records are organized, filed and kept.	3.3	Implemented
Educational and vocational information are posted on bulletin boards strategically located inside/outside the guidance center.	3.4	Much Implemented
Information on student's scholarship grants, and other test result whether group or individual test are made available to the students.	3.3	Implemented
Grand Mean	3.3	Implemented

### Information Services

Table 1b presents the perception of the respondents on the level of implementation of the guidance program in terms of information service. The service as a whole was found out to be “implemented” having a grand mean of 3.3. Highest mean of 3.7 corresponded to the item that in the guidance program, “visit to places of employment are made”. This is attributed to the encouragement of the advisers/guidance counselors for students to visit establishments where they can observe the intricacies of their future work. Lowest mean of 3.0, though still rated

Implemented, are on “motion pictures, filmstrips of place of employment are used”. This indicates that while this activity could exist, it is not implemented fully.

The data in this guidance service signifies that the guidance counselors of the national high schools still had limited strategies in disseminating the information to the parents and students, perhaps due to the counselors’ lack of educational enhancement through trainings or seminars. Mendoza (2003) stated that the student should be equipped with valuable information and different nature and opportunities of occupations where his skills, interests, and capabilities as a person will be properly developed and enhanced.

Table 1b. Level of Implementation of the Guidance Program in terms of Information Services

Indicator	Mean	Interpretation
Develop a broad and realistic view of life’s opportunities at all educational levels.	3.4	Much Implemented
Provide an understanding of the wide scope of related activities which are educational, occupational and social in nature	3.4	Much Implemented
Educational information are immediately available in guidance office such a scholastic progress of students; results of tests taken; school rules and regulations; and school clubs.	3.4	Much Implemented
Vocational and occupational information are readily available in the guidance office such as occupational needs of community, occupational decision making, and employment picture	3.2	Much Implemented
Active participation of guidance adviser and school principal in the formation services of school.	3.5	Implemented
Coordination with library services as regards to availability of books and other informative reading materials on evaluation and occupation is assured.	3.3	Implemented
Career orientation days are held annually.	3.2	Implemented
Educational and occupational lectures are given by resource person during convocations.	3.4	Implemented
Visit to place of employment are made.	3.7	Implemented
Motion pictures, filmstrips of place of employment are used.	3.0	Implemented
Grand Mean	3.3	Implemented

### Counseling Services

Table 1c presents the perception of the respondents on the level of implementation of the guidance program in terms of counseling service. The service as a whole was found out to be “implemented” having a grand mean of 3.2. Highest mean of 3.6 corresponded to the item that in the guidance program “helps the student discover and develop his/her abilities, interests and potentials in the area of personal and academic decision-making and in her personal and social adjustments”. This clearly manifests that the school, through the various student services, provides the relevant activities, which would cater to the holistic development of the learners. Lowest mean of 3.0, though still rated Implemented, are on “participation of psychometrician, guidance head; guidance counselor; and teacher/adviser in the counseling process” and “use of various techniques while conducting counseling sessions”. This indicates that though the service exists, there is a need for guidance counselors to update themselves on various counseling techniques.

Table 1c. Level of Implementation of the Guidance Program in terms of Counseling Services

Indicator	Mean	Interpretation
Help the student discover and develop his/her abilities, interests and potentials in the area of personal and academic decision-making and in her personal and social adjustments.	3.6	Much Implemented
Help the student become aware of her weaknesses and her limitations, and to accept or minimize them by improving herself in these areas of concern.	3.5	Much Implemented
Complete coverage of counseling services such as individual counseling, group counseling, educational counseling, vocational/occupational counseling, techniques used in counseling and peer counseling	3.2	Implemented
Counseling service include the participation of psychometrician, guidance head, guidance counselor and teacher/adviser.	3.0	Implemented
Make use of the various school guidance records in the counseling progress.	3.3	Implemented

Use the various techniques while conducting counseling sessions.	3.0	Implemented
Make use of the different counseling procedures for effective counseling session.	3.1	Implemented
Conduct both individual and group counseling sessions.	3.1	Implemented
Grand Mean	3.2	Implemented

#### *In-School Placement Services*

Table 1d presents the perception of the respondents on the level of implementation of the guidance program in terms of in-school placement service. The service as a whole was found out to be “implemented” having a grand mean of 3.2. Highest mean of 3.5 corresponded to the item that in the guidance program, “in-school placement involves actively the guidance head, guidance counselor, and teacher/adviser”. This indicates the collaboration that is existing among the providers of in-school placement service. Lowest mean of 3.0, though still rated Implemented, is that the guidance program “assist student in establishing linkages with companies or school for training for job opportunities”. This indicates that collaboration with agencies outside the school on job opportunities is not yet fully observed. This confirms the observation that visits in places of employment are done by students themselves, without the formal arrangement of schools. Cinco (2007) emphasized that placement is a manner of helping students be in the proper situations where the potentials are maximized and where they find satisfaction in the place or situation.

Table 1d. Level of Implementation of the Guidance Program in terms of In-School Placement Services

Indicator	Mean	Interpretation
Assist student to choose a course or vocation suited to their interest and potentials.	3.2	Implemented
Assist student in establishing linkages with companies or school for training for job opportunities.	3.0	Implemented
In-school placement included placement of a student in a particular activity and in extra-curricular activities.	3.3	Implemented
In-school placement involves actively the guidance head, guidance counselor, and teacher/adviser.	3.5	Much Implemented
Grand Mean	3.2	Implemented

#### *In-school follow-up services*

Table 1e presents the perception of the respondents on the level of implementation of the guidance program in terms of in-school follow-up service. The service as a whole was found out to be “much implemented” having a grand mean of 3.4. Highest mean of 3.6 corresponded to the item that the guidance program provides for a “regular follow-up on the students’ progress, school leavers, and school graduates”. This indicates that the school has a good monitoring system of students’ achievement and whereabouts. Lowest mean of 3.3, though still rated Implemented, is that the guidance program provides for the “active involvement of guidance head, guidance counselor, teacher/adviser, and school administrator in the follow-up service”. This indicates that despite the observable participation of the concerned individuals, sustainability could improve the service.

Table 1e. Level of Implementation of the Guidance Program in terms of In-School Follow-up Services

Indicator	Mean	Interpretation
Discover year levels at which most drop out occur.	3.5	Much Implemented
Find out why a student leaves school before graduation.	3.5	Much Implemented
Regular follow-up on the students’ progress, school leavers, and school graduates.	3.6	Much Implemented
Active involvement of guidance head, guidance counselor, teacher/adviser, and school administrator in the follow-up service.	3.3	Implemented
Grand Mean	3.4	Much Implemented

#### *Problems Encountered in the Implementation of the Guidance Program*

Table 2 presents the level of the problems encountered by the guidance counselors in the implementation of the guidance program. The data showed that generally, the respondents encountered “less serious” problems on the implementation of the guidance program. The most pressing problems include “the lack of guidance counselor assigned in some school”, “lack of funds” and “lack of adequate orientation from among administrator and teacher



regarding the function of guidance". The problems are interrelated in as much as given the appropriate funds, the need for guidance counselors could be addressed, as well as the orientation programs on guidance services that could be provided for the clientele.

Table 2. Problems Encountered in the Implementation of the Guidance Program

Problem	Mean	Interpretation
Lack of guidance counselor assigned in some school	2.9	Serious
Lack of funds	2.6	Serious
No adequate orientation from among administrator and teacher regarding the function of guidance	2.6	Serious
There is no support from the administrator/principal	2.5	Less Serious
There is no cooperation from the teacher and other staff	2.5	Less Serious
Lack of facilities	2.5	Less Serious

### Conclusions

The various services of the guidance programs of the national high schools in the Division of Northern Samar is implemented. The services are existing and functional. However, there is still a need to improve the services as some services may be existing but, because of limitations of the school, may not be properly implemented. Problems of the implementation of the guidance program are more of administrative in nature. Funds to support the programs, as well as the appropriate manpower, are important concerns that should be addressed by the school.

### Recommendations

1. It is recommended that the Schools Division Superintendent should orient the principals/ administrators, teachers and staff of every school through memorandum, the importance of the guidance counselor and the services of the guidance program.
2. It is recommended that the school administrators must support the guidance program financially in their individual inventory, information services, counseling services, and in-school service for the guidance program services to implement fully the said services.

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## **Prevalence Of Depression Among Osteoarthritis Clients In Baguio City**

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### **Abstract**

Osteoarthritis (OA) is a degenerative and non-inflammatory disorder of movable joints. Depression may be a reaction to pain in osteoarthritis (Romano, 2013). The study aims to determine prevalence of depression among OA clients by determining degree of depression and significant difference in depression according to some factors. Purposive, convenience, and quota sampling were used. 3 respondents were taken per barangay of 129 barangays in Baguio City. Responses were tallied and subjected to percentage, t-test and f-test. The degree of depression of OA clients is normal ups and downs with 191/351(54.42%) respondents. Results show significant differences with genetics and history of bone injury to depression of OA clients and no significant differences as to age, sex, BMI, co-morbidity, occupation, history of joint injury and congenital deformities. There are individuals classified as "clinically depressed", implying that although results are statistically insignificant, it is clinically significant. Discussions on management of OA should be holistic and integrated into the curriculum. Nurses should individualize care for OA clients because of its different biopsychosocial effects.

**Keywords:** Osteoarthritis (OA), depression, prevalence, co-morbidity, body mass index (BMI)

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## Introduction

Osteoarthritis (OA) is a non-inflammatory disorder of movable joints manifesting deterioration and abrasion of articular cartilage, and the formation of new bones at joint areas (Piaget, 2006). According to Chambers (2014), OA, or degenerative joint disease, of any joint, is an insidious and non-curable disease. OA is the most prevalent of the chronic rheumatic diseases and is a leading cause of pain and disability in most countries worldwide. According to the WHO (2010), there are over 151 million individuals who are suffering from OA. In the last 5 years, there is about 5 million increase of OA individuals in America. In 2008, 6.8% of individuals in Asia have had OA and according to studies, it will increase to 16.2% by the year 2040. In the Philippines alone, there are about 11 million OA individuals in the year 2008, and by the year 2025, it will be doubled (Pujalte, 2010). There are about 13.7% OA individuals in rural areas and 6.0% in urban places in the Philippines. (Fransen, Bridgett, March, Hoy, Penserga, & Brooks, 2011). As stated in Pensarga's review article, the point prevalence of OA in the Philippines is 4.1% of an urban population (mean age=34). Since there is an increasing incidence of OA, it is relevant to be aware of such to be able to recognize all considerable factors that may predispose and precipitate a person to have OA.

According to Lin(2008), depression is significant among patients with arthritis and musculoskeletal illnesses. The prevalence of depression in the general older population is estimated to be between 7% and 17% (Luppa, et al., 2012); in community-dwelling adults with OA, it is 20% (Rosemann, Backenstrass, Joest, Rosemann, Szecsenyi, & Laux, 2007). Prior studies have reported negative impacts of depression on the quality of life of individuals with osteoarthritis (Lin E. , Katon, Von Korff, Tang, Williams, & Kroenke, 2003). Depression has been strongly linked to OA. Researchers think one reason for this link and it is because OA limits a person's ability to perform daily tasks (Howes, 2014). Depression may be a reaction to the pain in OA (Romano, 2013) and the experience of pain in OA may be aggravated by depression (Blummer, 1982)(Chou, 2007), but other studies indicate that the causal relationship may be two-way (Magni, 1994). As in the general population, depression influences consulting behavior and increases health service utilization (Katon & Schulberg, Epidemiology of depression in primary care, 1992)(Jordan, Jinks, & Croft, 2006). In contrast, previous findings indicate that physicians overestimate structural changes in OA and underestimate the contribution of depression to pain perception, functional ability, and quality of life(Rosemann, Joos, Koerner, Szecsenyi, & Laux, 2006)(Memel, Kirwan, Sharp, & Hehir, 2000). The likelihood of depression to occur is increased by several factors that affect older people with greater frequency, such as social isolation, and comorbidity.

The researchers have identified some factors that can affect the depression of clients with OA. Under the independent variables are age, gender, genetics, body mass index, orthopedic conditions, activity level, comorbidities and depression. The dependent variable is the degree of depression in clients with OA.

Depression is a factor considered in the study. This is defined as the feeling of being sad or blue that interferes with daily life and may cause pain for both the afflicted and the persons around them. Three percent of Filipinos are clinically diagnosed as depressed (Goulbourn, 2013). In the year 2011, BGHMC had 1,316 recorded cases of depression with ages 15 to 44 years old (Dar, 2013).

The researchers have included comorbidity as another factor in the study. Comorbidity is defined as the co-existence of two or more health problems. The co-existing health problems can interact with each other and result to high levels of disability (Chan, Ngai, Ip, Lam, & Lai, 2009). The reasons for the high incidence of comorbidities in this study are not known, and whether patients with OA are more likely to develop co-morbidities or vice versa remain to be established (Breedveld, 2004).

The researchers have also considered genetics as a factor. Although the multifactorial nature of OA is well recognized, genetic factors have been found to be strong determinants of the disease. The manner in which genes specifically influence the incidence and progression of OA and associated disability is difficult to ascertain from the available data. OA varies across racial groups, including differences in prevalence and radiographic features and differences in pain and function (Allen, 2010). Given these data, since the study is focused in Baguio City, there will be a higher percentage that the subjects are Filipinos than other races. Therefore, it is needed to research on whether genetics has an association with the occurrence of OA in Philippine setting (specifically Baguio City).



Age and sex are two factors chosen for this study. OA occurs more often in women than in men (although among those younger than age 45, men are affected more often than women). Indeed, there is no question that OA in particular is related to disability as adults age (American Accreditation HealthCare Commission, 2012). The risk of OA increases with age, so that by the age of 80 years, radiographic evidence of joint degeneration is found in nearly everyone. OA can affect people of any age, but it is much more common in older people (Tan, 2013). It rarely occurs in people younger than age 40. According to Massicotte(2011), the significant increase in OA prevalence in women around the time of menopause has led to multiple investigations of the hormonal implication in the pathophysiology of OA. The conflicting results seem that further research is needed to clarify the role of some hormones and age in the occurrence of OA.

BMI was strongly and positively associated with KOA in men and women. Manek (2013) states that obesity causes OA. A journal by Preidt(2009), found out that extremely obese individuals didn't develop OA if their bodies didn't have leptin. In fact, joints in obese individuals without leptin appeared healthier than those in normal individuals. Since there is no precise onset on whether an individual will most likely develop OA if he or she is obese or not, the researchers will include this to test whether BMI will contribute to the incidence of having OA.

Occupations, which involve physical activities like lifting, knee bending or squatting, sitting, walking and jumping, according to Aluoch&Wao (2009), can be a cause for developing OA. According to Andersen (2012), occupation among women, farming and exposure to physically demanding tasks at home were associated with knee OA and, further, working in the clothing industry, cleaning and agriculture have been identified for the risk of OA of the hip, knee and hand in women. But in another study by Campbell (1999), it states that most men which is about 40% belonged to sedentary jobs that is, most worked or had worked in an office, most likely to develop OA.

Orthopedic condition is another factor that the researchers have selected. In relation to this, joint dysplasia, fractures of articular surfaces, and tears of menisci and ligaments that increase joint instability precede the development of OA in a high percentage of affected individuals (Felson, 2000). Other risk factors considered in association with development of OA include: poor posture, abnormal joint anatomy and alignment, failure to accurately realign fractures (Wheaton, 2011).

## Methods

The researchers used a quantitative-descriptive method of research. The study used quota sampling, where the researchers had 3 respondents per barangay. The researchers conducted the study in all the barangays of Baguio City. Baguio City was considered to be the most feasible because the researchers are currently residing and studying in Baguio City. The respondents are diagnosed with OA, with or without co-morbidity and a resident of Baguio City for at least six months, aged 18 years old and above, able to read and write the English language, regardless of gender, educational attainment, religion and ethnicity.

A self- made questionnaire and an adopted questionnaire, which is Beck's Depression Inventory, was used as a tool in gathering data for the study. The researchers were divided in to four groups with three members each and distributed the questionnaires in all barangays. The researchers floated the questionnaires during their semester break and were extended up to the first 3 weeks of the second semester to be able to meet their intended sample size. The researchers explained the study, its aims and the benefits for them as respondents. The researchers have obtained consent from each of the participants and those who approved were given 15-20 minutes to answer the questionnaire with 5-10 meters away from them, although in some instances where the respondents seek clarifications the researchers go near them. After the questionnaires were gathered, responses were tallied and subjected to percentage, t-test and f-test.

## Results and Discussion

Results of the study show that the degree of depression of individuals with OA is normal ups and downs with 191/351(54.42%) respondents. There is no significant difference in the degree of depression as to factors specifically Age, Sex, BMI, Co-Morbidity, Genetics, Occupation, and Orthopedic Conditions, to the effect of depression levels among OA clients.



**Table1. Degree of Depression of Patients with OA in Baguio City**

Degree of Depression	Frequency	Percentage (%)
Normal Ups and Down	191	54.42 %
Mild Mood Disturbance	67	19.09 %
Borderline Clinical Depression	42	11.97 %
Moderate Depression	41	11.68 %
Severe Depression	9	2.56 %
Extreme Depression	1	0.28 %
Total	351	100 %

The average Becks Depression Index Score of the 351 participants is 11.91 which fall under the category Mild Mood Disturbance. This study revealed that depression occurs among clients with osteoarthritis. And because of this, the pain present in osteoarthritis causes the mild to moderate depression among individuals with osteoarthritis. This will now reveal that osteoarthritis is not only considered in its physiological manifestation but also to its psychological effect as well. The result of our study shows that people with OA tend to have mild mood disturbance.

**Table 2.a. Difference in Degree of Depression among Osteoarthritis Clients According to Age**

Age	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
18 to 40 years old	71	20.23%	20	5.70%	15	4.27%	13	3.70%	5	1.43%	0	0%	124	35.33%
41 to 64 years old	100	28.49%	30	8.55%	22	6.27%	22	6.27%	2	0.57%	1	0.28%	177	50.43%
65 years old and above	20	5.70%	17	4.84%	5	1.42%	6	1.71%	2	0.57%	0	0%	50	14.24%
Total	191	54.42%	67	19.09%	42	11.96%	41	11.68%	9	2.57%	1	0.28%	351	100%
CV=1.54 2696 TV = 2.98	Decision: Accept Ho													

In Table 2.a, of the 351 respondents, the greatest percentage of respondents that had depression with regards to their age was 50.43% with them being 41 to 64 years old, followed by 35.33% of those as 18 to 40 years old, and lastly, 14.24% being 65 years old and above. The researchers' study revealed that there is no significant difference in the depression of OA clients among the different age groups.



**Table 2.b. Difference in Degree of Depression among Osteoarthritis Clients According to Sex**

Sex	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Male	87	24.79%	31	8.83%	17	4.84%	10	2.85%	4	1.14%	1	0.28%	150	42.74%
Female	104	29.63%	36	10.26%	25	7.12%	31	8.83%	5	1.42%	0	0%	201	57.26%
<b>Total</b>	<b>191</b>	<b>54.42%</b>	<b>67</b>	<b>19.09%</b>	<b>42</b>	<b>11.97%</b>	<b>41</b>	<b>11.68%</b>	<b>9</b>	<b>2.56%</b>	<b>1</b>	<b>0.28%</b>	<b>351</b>	<b>100%</b>
<b>CV = 1.28</b> <b>TV = 2.015</b>		<b>Decision: Accept Ho</b>												

In Table 2.b, of the 351 respondents, the highest percentage was 57.26% with them being female, while 42.74% were male. The results of the study reveal that there is no statistical significant difference in the depression between men and women.

Table 2.c shows that among the 351 respondents, normal weight respondents has the greatest number with 226 (64.39%) respondents, followed by overweight with 93 (26.50%) respondents, obese with 18 (5.13%) respondents and lastly, underweight with 14 (3.99%) respondents. The results of the study revealed that there is no significant difference in the depression of OA according to their BMI.

**Table 2.c. Difference in Degree of Depression among Osteoarthritis Clients According to BMI**

BMI	Normal Ups and Down		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Underweight	6	1.71%	1	0.28%	0	0%	5	1.42%	2	0.57%	0	0%	14	3.99%
Normal	131	37.32%	35	9.97%	32	9.12%	23	6.55%	4	1.14%	1	0.28%	226	64.39%
Overweight	48	13.68%	24	6.84%	9	2.56%	9	2.56%	3	0.85%	0	0%	93	26.50%
Obese	6	1.71%	7	1.99%	1	0.28%	4	1.14%	0	0%	0	0%	18	5.13%
<b>Total</b>	<b>191</b>	<b>54.42%</b>	<b>67</b>	<b>19.09%</b>	<b>42</b>	<b>11.97%</b>	<b>41</b>	<b>11.68%</b>	<b>9</b>	<b>2.56%</b>	<b>1</b>	<b>0.28%</b>	<b>351</b>	<b>100%</b>
<b>CV = 1.7215</b> <b>TV = 2.54</b>		<b>Decision: Accept Ho</b>												

Table 2.d. Difference in Degree of Depression among Osteoarthritis Clients According to Co-Morbidity

Co-Morbidity	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	N	%	n	%	n	%	n	%	n	%	n	%	n	%
With	89	25.36%	37	10.54%	21	5.98%	20	5.70%	3	0.85%	0	0%	170	48.43%
Without	102	29.06%	30	8.55%	21	5.98%	21	5.98%	6	1.71%	1	0.28%	181	51.57%
Total	191	54.42%	67	19.09%	42	11.96%	41	11.68%	9	2.57%	1	0.28%	351	100%
<b>CV=</b> 0.6472 <b>TV=</b> 2.015	<b>Decision: Accept Ho</b>													

In table 2.d, among the 351 respondents, those who did not have co-morbidity had the greatest percentage with 51.57% and those with co-morbidity had a percentage of 48.43% of the total population. Results show that there is no significant difference in the level of depression among clients with osteoarthritis according to presence of co-morbidity.

Table 2.e. Difference in Degree of Depression among Osteoarthritis Clients According to Genetics

Genetics	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
With Family History	76	21.65%	33	9.40%	17	4.84%	23	6.55%	6	1.71%	1	0.28%	156	44.44%
Without Family History	115	32.76%	34	9.69%	25	7.12%	18	5.13%	3	0.85%	0	0	195	55.56%
Total	191	54.42%	67	19.09%	42	11.97%	41	11.68%	9	2.56%	1	0.28%	351	100%
<b>CV =</b> 2.874136 <b>TV =</b> 2.015	<b>Decision: Reject Ho; Accept Ha</b>													

The values in the table 2.e shows that out of the 351 respondents, the greatest percentage is 55.56 % respondents having no family history of OA and 44.44% participants as the lowest percentage having a family history of OA. The values presented shows significant difference in the depression of OA clients in relation to genetic predisposition.



**Table 2.f. Difference in Degree of Depression among Osteoarthritis Clients According to Occupation**

Occupation	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	N	%	n	%	n	%	n	%	n	%	n	%
Blue	127	36.18%	46	13.10%	28	7.97%	22	6.26%	7	1.99%	1	0.28%	231	65.81%
White	47	13.39%	13	3.70%	11	3.13%	13	3.70%	1	0.28%	0	0%	85	24.21%
None	9	2.56%	6	1.71%	2	0.56%	4	1.14%	1	0.28%	0	0%	22	6.26%
Students	8	2.27%	2	0.85%	1	0.28%	2	0.56%	0	0%	0	0%	13	3.70%
<b>Total</b>	<b>191</b>	<b>54.41%</b>	<b>67</b>	<b>19.08%</b>	<b>42</b>	<b>11.96%</b>	<b>41</b>	<b>11.68%</b>	<b>9</b>	<b>2.56%</b>	<b>1</b>	<b>0.28%</b>	<b>351</b>	<b>100%</b>
<b>CV = 1.351</b> <b>TV = 2.54</b> <b>Decision: Accept Ho</b>														

In the table above, among 351 respondents, the greatest percentage was 65.81% under Blue collar type, followed by 24.21% under white collar type, then 6.26% under category of none, and lastly, 3.70% under category students. The results show that there is statistical insignificance in the depression of OA clients in accordance to the type of their occupation.

**Table 2.g. Difference in Degree of Depression among Osteoarthritis Clients According to History of Bone Injury**

Bone Injury	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	N	%	n	%	n	%	n	%	n	%	n	%
With	39	11.11%	13	3.70%	13	3.70%	15	4.27%	4	1.41%	0	0%	84	23.93%
Without	152	43.30%	54	15.38%	29	8.26%	26	7.41%	5	1.42%	1	0.28%	267	76.07%
<b>Total</b>	<b>192</b>	<b>54.70%</b>	<b>67</b>	<b>19.09%</b>	<b>42</b>	<b>11.97%</b>	<b>41</b>	<b>11.68%</b>	<b>9</b>	<b>2.56%</b>	<b>1</b>	<b>0.28%</b>	<b>351</b>	<b>100%</b>
<b>CV = 2.68933</b> <b>TV = 2.015</b> <b>Decision: Reject Ho; Accept Ha</b>														

In table 2.g, out of the 351 respondents, the highest percentage was with the respondents without bone injury which is 76.07% (n=267) then followed by 23.93% which is with bone injury. Results show that there is a significant difference in the depression of OA clients according to presence of history of bone injury.

Table 2.h. Difference in Degree of Depression among Osteoarthritis Clients According to History of Joint Injury

Joint Injury	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
With	22	6.27	18	5.13	7	1.99	7	1.99	2	0.57	0	0%	56	15.95%
Without	169	48.15	49	13.96	35	9.97	34	9.69	7	1.99	1	0.28%	295	84.05%
Total	191	54.42%	67	19.09%	42	11.96%	41	11.68%	9	2.56%	1	0.28%	351	100%
CV = 1.38246 TV = 2.015	<b>Decision:</b> Accept Ho													

In table 2.h, majority of the 351 respondents are without joint injury with 295 (84.05%) respondents while 56 (15.95%) of the respondents are with joint injury. The Ho is accepted since the tabular value is greater than the computed value, which, therefore show insignificant results.

Table 2.i Difference in Degree of Depression among Osteoarthritis Clients According to Congenital Deformities

Congenital Deformities	Normal Ups and Downs		Mild Mood Disturbance		Borderline Clinical Depression		Moderate Depression		Severe Depression		Extreme Depression		Total	
	N	%	N	%	n	%	n	%	n	%	n	%	n	%
With	4	1.14%	4	1.14%	1	0.28%	0	0%	1	0.28%	0	0%	10	2.85%
Without	187	53.28%	63	17.95%	41	11.68%	41	11.68%	8	2.28%	1	0.28%	341	97.15%
Total	191	54.42%	67	19.09%	42	11.96%	41	11.68%	9	2.57%	1	0.28%	351	100%
CV = 1.542696 TV = 2.015	<b>Decision:</b> Accept Ho													

In Table 2.i, among the 351 respondents, majority of them are without congenital deformities with a total of 341 (97.15%) respondents while 10 (2.85%) respondents have congenital deformities. Since the Tabular Value (TV) is greater than the Computed Value (CV) the decision made was to accept Ho and as the result it is statistically insignificant, although the values show that it is clinically significant.

## Conclusion

The aim of the study was to determine prevalence of depression among OA clients in Baguio City by determining degree of depression and significant difference in depression of OA clients according to age, gender, BMI, co-morbidity, genetics, occupation, history of bone injury, history of joint injury, congenital deformities. Results showed that of the factors, genetics and history of bone injury influence the depression of OA clients. With each factor having its corresponding table, results have shown that most of the respondents were classified under Normal Ups and Downs 191/351(54.42%) respondents however there are individuals classified as "clinically depressed", implying that although results are statistically insignificant, it is clinically significant. The researchers therefore conclude that the degree of depression of OA clients in Baguio City is Normal Ups and Downs and that genetics and history of bone injury influence the occurrence of depression of OA clients.



## Recommendations

Based on the findings of the study, discussions on OA should then be incorporated with its effects, specifically depression, and its varying degrees considering the factors identified in the study. Since the depression levels of OA clients fall under mild mood disturbance, health care workers and professionals should employ self-help strategies for the clients to use and formulate individualize care for clients of OA because of its psychological effects. The researchers recommend other factors such as socioeconomic status and the span of time that they have been diagnosed or have symptomatic experience with the disease for the next researches. Other factors to be considered for the next researches are the clients' knowledge on the disease itself and the information dissemination amongst other health care workers.

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## **Variates Of The Teaching Aptitude Of Teacher Education Students: Inputs To Teacher Education Admission**

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### **Abstract**

Teacher education institutions are mandated to produce the best graduates to ensure that only the best inputs into the teaching profession are hired. However, the issue of teacher inputs in the teaching profession could be traced on how teacher education institutions admit their students.

The research looked into the students' age, sex, course, school graduated, parents' educational attainment, parents' monthly income, high school Grade Point Average, College Grade Point Average for the first semester, attitudes towards the teaching profession and the performance of the students in the Teaching Aptitude Test (TAT). Significant relationship between the profile of the respondents and the teaching aptitude was found. The study utilized the descriptive correlational design. The respondents composed of the freshman students enrolled in SY 2013 – 2014, answered a survey questionnaire on the profile. The performance in the Teaching Aptitude Test was based on the examination results secured from the College Guidance Office. Frequency counts; percentages, weighted means and multiple regression analysis were used to analyze the data obtained.

The profile of the College of Education freshmen revealed that majority are of age range of 15-19, female, graduates of a national high school, with parents who are either college undergraduates or college graduates, with parents whose income range below P10000, have Good performance in high school, have Good performance in college in the first semester, and Highly Favorable teaching aptitude. The respondents had Low performance in the aptitude test. In general, no significant correlation was found between the profile and the teaching aptitude. However, monthly income and attitudes towards teaching significantly predicted the teaching aptitude.

The study recommended the development and validation of a localized teaching aptitude test. Another research correlating the teaching aptitude test results with other variables is suggested.

Key words: variates, teaching aptitude, teacher education students, admission

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## Introduction

The role of teachers in promoting the quality of education is undeniable. Effective teachers are needed to improve the educational system. One important measure of teacher effectiveness is the teaching aptitude. Aptitude is considered to be an important characteristic of an individual, which can predict the future success or failure of an individual in one occupation or areas of occupations. It may be described as a specific ability or a specific capacity distinct from the general intellectual ability, which helps an individual to acquire degree of proficiency or achievement in a specific field (Tasleema & Hamid, 2012). To find the natural ability of an individual in scholastic, vocational or developed component of a competency to do a certain kind of work at a certain level, it needs the aptitude of the student (Raza, 2011). Aptitude to be a teacher demands appropriate attitude. If a person's attitude and aptitude towards teaching is clear, then the possibility of success in teaching is high.

Teacher education institutions are required to produce the best graduates to ensure that only the best inputs into the teaching profession are hired. However, the issue of teacher inputs in the teaching profession could be traced on how teacher education institutions admit their students. It is essential to have an aptitude test in selecting students in teacher education institutions. Teaching aptitude test is found to be a good predictor of teacher effectiveness (Beena, 1995).

The College of Education of the University of Eastern Philippines requires prospective freshman students who will take up education as their course to take the Teaching Aptitude Test. This test is designed to evaluate the suitability of the students for the role and responsibilities of a teacher. This study tried to find out if the teaching aptitude of the student-respondents is affected by different factors. The inputs will help the college in coming up with policy redirections in its admission requirements.

## Statement Of Objectives/Problems

The study was conducted to:

1. Determine the profile of the freshman College of Education students in terms of age, sex, course, type of school graduated, parents' educational attainment, parents' monthly income, high school Grade Point Average (GPA), college Grade Point Average (GPA) for the second semester, and attitudes towards teaching;
2. Determine the teaching aptitude of the respondents; and
3. Look into the significant relationship between the profile of the respondents and their teaching aptitude.

## Methodology

The study used the descriptive-correlational research design. A survey questionnaire on the respondents' profile was administered to all freshman students enrolled in SY 2013 -2014. It was composed of two parts, the respondents' profile and their attitude towards teaching. Respondents' profile such as age, sex, course, school graduated, parents' educational attainment, parents' monthly income, high school Grade Point Average, college Grade Point Average for the second semester, and attitudes towards the teaching profession were organized using frequency counts, percentages and weighted mean. The high school Grade Point Average was categorized as: 95-100 (Very Good); 90-94.99 (Good); 85-89.99 (Fair); 80-84.99 (Poor). Respondents' Grade Point Average in the second semester was categorized as: 1.00– 1.24 (Excellent); 1.25 - 1.74 (Very Good); 1.75 – 2.49 (Good); 2.50 - 2.99 (Fair); and 3.00 and below (Poor). The weighted mean for the attitude towards teaching was computed and classified as: 4.20 - 5.00 (Very Highly Favorable); 3.40 – 4.19 (Highly Favorable); 2.60 – 3.39 (Moderately Favorable); 1.80 – 2.59 (Highly Unfavorable); and 1.00 – 1.79 (Very Highly Unfavorable). The scores for the teaching aptitude test was taken from records of the College Guidance Office and were categorized as: 100 above (Very High); 75 – 99 (High); 50 – 74 (Average); 25 – 49 (Low); and below 25 (Very Low). Multiple regression analysis was used to determine the correlation of the respondents' profile and teaching aptitude score.

## Results And Discussion

Table 1 presents the frequency distribution on the profile of the respondents. Out of 240 respondents, 233 or 97.1 percent belong to the age bracket of 15 -19; 4 or 1.7 percent belong to 20 – 24; and 3 or 1.2 percent to 25 – 29 years old. This implies that the freshman students enrolled in the College of Education are in the typical age range for first year students. There were 177 or 73.8 percent female respondents and 63 or 26.2 percent male. This indicates that female students are more attracted to teacher education courses than male students. There were 80 or 33.3 percent BEED students; 79 or 32.9 percent BSED students; 30 or 12.5 percent BEED-HE and



BSHE students; and 21 or 8.8 percent BSIE students. The frequency table showed that majority are from BEED and BSED and equal number of respondents from BEED-HE and BSHE department. Majority of the respondents were graduates of national high school and technical vocational schools with 134 or 55.8 percent and 75 or 31.2, respectively; while 31 or 12.9 percent from private schools. This implies that the most of the respondents were sent to public schools that could be attributed to low family income of the parents. Majority of the parents' monthly income of the respondents belonged to 10,000 pesos and below bracket. Most of the respondents' parents are college graduates with 73 or 30.4 percent; followed by 55 or 22.9 percent high school graduates; 54 or 22.5 percent college undergraduates; 19 or 7.9 percent elementary graduates; 17 or 7.1 percent high school undergraduates; 12 or 5.0 percent elementary undergraduates; and 10 or 4.2 percent post graduates. The high school grade point average of the respondents showed that 207 or 86.2 percent have good performance; 31 or 12.9 percent have very good performance; and 2 or 0.8 percent performed excellently. This could be explained by the fact that the college's requirement for high school GPA is above 85 percent and categorized as good performance. With regards to the college GPA, 186 or 77.5 percent had good performance; 42 or 17.5 percent had very good performance; 9 or 3.8 percent had fair performance; and 3 or 1.2 percent performed poorly. This implies that the respondents had an average academic performance. Respondents' attitude towards teaching profession showed that 154 or 64.2 percent had highly favorable attitude; 74 or 30.8 percent had very highly favorable attitude; and 12 or 5.0 percent had moderately favorable attitude. This indicates that majority of the respondents had a positive outlook on the teaching profession.

Table 1. Profile of the Respondents

PROFILE	f	%
Age		
15 – 19	233	97.1
20 – 24	4	1.7
25 – 29	3	1.2
Sex		
Male	63	26.2
Female	177	73.8
Course		
BEED	80	33.3
BSED	79	32.9
BEED-HE	30	12.5
BSHE	30	12.5
BSIE	21	8.8
School Graduated		
Private	31	12.9
National High School	134	55.8
Technical Vocational	75	31.2
Parents' Educational Attainment		
Elementary Undergraduate	12	5.0
Elementary Graduate	19	7.9
High School Undergraduate	17	7.1
High School Graduate	55	22.9
College Undergraduate	54	22.5
College Graduate	73	30.4
Post Graduate	10	4.2
Parents' Monthly Income		
Below 1 000	20	8.3
1 000 – 4 999	76	31.7
5 000 – 9 999	54	22.5
10 000 – 14 999	38	15.8
15 000 – 19 999	22	9.2
20 000 – 24 999	13	5.4
25 000 – 29 999	5	2.1
30 000 – above	12	5.0
High School Grade Point Average		
Excellent	2	0.8
Very Good	31	12.9
Good	207	86.2



College Grade Point Average (2 <sup>nd</sup> Semester)		
Very Good	42	17.5
Good	186	77.5
Fair	9	3.8
Poor	3	1.2
Attitudes towards the Teaching Profession		
Very Highly Favorable	74	30.8
Highly Favorable	154	64.2
Moderately Favorable	12	5.0

Table 2 shows the teaching aptitude profile of respondents from the result of the test. Out of 240 respondents, 209 or 87.1 percent had low performance; 27 or 11.2 percent had average performance; and 4 or 1.7 percent had very low performance. This indicates that majority of the respondents did not perform well in the test. This finding of low teaching aptitude confirms the study of Daya (2011).

Table 2. Teaching Aptitude Profile

TEACHING APTITUDE	f	%
Average	27	11.2
Low	209	87.1
Very Low	4	1.7

#### *Relationship between Respondent's Profile and Teaching Aptitude*

Multiple regression analysis was utilized to test the relationship of respondent's profile and teaching aptitude of the freshman college students. Generally, the analysis result showed a significant R - value of 0.257 with a coefficient of determination equal to 0.066 (Table 3a) which means that only six percent of the variance in teaching aptitude percentage can be attributed to the independent variables. An F- value of 1.804 and significance value of 0.068 (Table 3b) suggested a not significant relationship between the respondents' profile and teaching aptitude because the p-value is greater than the 0.05 alpha level. Therefore, the effect of the independent variables is generally not significant.

Beta coefficient in table 3c indicated that among the nine independent variables, only parents' monthly income ( $\beta = 0.038$ , sig. = 0.008) and attitude towards teaching profession ( $\beta = -0.141$ , sig. = 0.026) significantly predicted the teaching aptitude score, while the rest of the independent variables showed a not significant relationship with the teaching aptitude test. These findings suggest that the freshman students of the College of Education with higher parents' monthly income indirectly affect their TAT result, the same way as their attitude towards teaching profession. In addition, the negative value of the beta coefficient for attitude towards teaching suggested that the teaching aptitude level was higher for those respondents with lower attitude towards teaching profession. These findings revealed that higher attitude towards teaching did not necessarily mean higher TAT level as far as this study is concerned. However, the respondents with higher parents' monthly income showed also a higher result in their teaching aptitude.

This study conformed to the study of Ushakumari (2008) that attitude towards teaching profession has significant relationship with teaching aptitude. The findings were also in agreement with Reddy's (1991) study where age did not influence the performance on teaching aptitude test. Likewise, Sharma (1984) found out that no significant effect of sex was found on teaching aptitude. However, Daya's (2011) study found out that teaching aptitude of the respondents did not significantly differ in terms of age and educational attainment of parents but significantly differed in terms of gender, occupation of parents and grade point average.

Table 3a. Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.257a	0.066	0.029	0.34197

Predictors: (Constant), age, sex, course, school graduated, parents' educational attainment, parents' monthly income, High School GPA, second sem. GPA, and Attitude towards Teaching



Table 3b. Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.899	9	.211	1.804	0.68a
Residual	26.897	230	.117		
TOTAL	28.796	239			

Predictors: (Constant), age, sex, course, school graduated, parents' educational attainment, parents' monthly income, High School GPA, second sem. GPA, & Attitude towards Teaching

Dependent Variable: Teaching Aptitude Level

Table 3c. Beta Coefficients

Model	Unstandardized Coefficients		Sig.
	B	Std. Error	
(Constant)	2.148	1.006	.034
Age	-0.008	.016	.628
Sex	-0.002	.054	.966
Course	.015	.022	.503
School Graduated	-.022	.035	.534
Parents' Educational Attainment	.002	.017	.899
Parents' Monthly Income	.038	.014	.008*
High School GPA	.008	.010	.427
College GPA (2 <sup>nd</sup> sem.)	-.106	.088	.229
Attitude towards Teaching	-.141	.063	.026*

Dependent Variable: Teaching Aptitude Level

## Conclusions

The respondents had low performance in the aptitude test, suggestive of a low teaching aptitude. However, the low performance could be explained by the fact that the instrument used was adopted from a foreign source. Time constraint was also a hindrance since the numerous items were to be answered in a very short time span only. The profile of the respondents in terms of age, sex, course, school graduated, parents' educational attainment, high school Grade Point Average, and college Grade Point Average for the second semester has no apparent influence in predicting teaching aptitude. Parents' monthly income and attitude towards teaching showed a significant relationship with teaching aptitude test which means that these two are predictors of teaching aptitude.

## Recommendations

1. The attitudes of a prospective teacher education student should be ascertained in the process of admission. Interviews would be a vital part of the admission process.
2. A replication of the research is suggested. However, other variables, which could affect teaching aptitude, should be taken into consideration.
3. Development and validation of a localized teaching aptitude test should be considered in another study.
4. Teaching aptitude test should be administered to second year students where students have already adjusted a bit to the teaching profession.

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## **Pre-Service Science Teachers' Conceptions of the Nature of Science and its Relationship to Classroom Practice**

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### **Abstract**

There are significant tensions regarding relative international educational effectiveness. In the science education field such concerns churn around the extent of science understanding with which students leave school. There have been suggestions that this aspect of science literacy is related to how well teachers help students to understand the nature of science. Previous research indicates the existence of both naïve and sophisticated views of this among both teachers and students. However, little research exists regarding Filipino students preparing to teach science in a locally and international fluid context, particularly how their views of the nature of science relate to their classroom teaching practices.

It was the purpose of this qualitative study involving seven pre-service science teachers from a single institution in Mindanao, Republic of the Philippines, to better understand the relationship of teacher views of the nature of science and the way that they taught science during their final teaching practice. Data was gathered through non-participant class observations, document, interview and survey analysis.

Findings reveal that:

- (a) These pre-service science teachers hold a mixture of naïve and sophisticated views of the nature of science;
- (b) Their views of science as empirically based (a potentially sophisticated view), subject to strict method and producing absolute knowledge (naïve views) transferred into their planning and delivery of practice lessons to a minor but discernible extent;
- (c) The views of science emerging from interview and survey were more varied and more sophisticated than appeared from the lessons planned or observed.

The implications of this study are significant because they support some indications in the literature that wider teacher conceptions can translate into practice. This suggests that change in the conceptions held by these teachers might lead to change in the experiences they offer to students in their classes. The research process piloted in this small study could be scaled up to make a useful contribution to science education as the nation for which it was context moves into a period of rapid curriculum change.

**Keywords:** Nature of Science (NOS); conceptions of the nature of science; classroom/teaching practice

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## Introduction

Scientific literacy has been advocated by science educators, science organisations, such as the American Association for the Advancement of Science (AAAS), National Research Council (NRC), and National Science Teachers Association (NSTA), and science reform documents as a perennial goal in science education (AAAS, 1995; 1998; Achieve, 2010b; Bell, Lederman, & Abd-El-Khalick, 2000). Furthermore, enhancing scientific literacy or enabling the students to approach scientific materials intelligently and to understand the world better, is emphasized by the Philippines' Commission on Higher Education's (CHED) Memorandum Order Number 59 (CMO No. 59) (1996), also known as the New General Education Curriculum (GED). Despite the strong emphasis on scientific literacy, poor performance in international science assessments and international studies of student achievement suggests that American (AAAS, 1995; Achieve, 2010a, b; Collins, 1997) and Filipino (Talisayan, Balbin, & De Guzman, 2006) students still experience low levels of scientific literacy. This educational crisis triggered national reform efforts which put scientific literacy at the top priority list and aimed to help the schools produce scientifically literate graduates.

Developing a well-informed understanding of the nature of science (NOS) has been seen as a central and critical component of scientific literacy and has consequently been repeatedly put forward as a goal for science education over the past several decades. Such advocacy is reasonable, as it is hard to teach something if you do not know what it is and how it develops. Emphasis on NOS as an integral component of scientific literacy has become a common theme among science reform efforts and reform documents such as those produced by the American Association for the Advancement of Science and the National Research Council (Abd-El-Khalick, 2001; Kattuala, Verma, & Martin-Hansen, 2009; Lederman 1999; Schwartz & Lederman 2002; Wang, 2001). Helping students develop well-informed conceptions of the nature of science is an essential goal of science education (Bell, Lederman, and Abd-El-Khalick, 2000), but research reveals that many science pre-service and in-service teachers and students have low, naive, uninformed and inadequate NOS views of many aspects of the nature of science that are not consistent with the conceptions promoted by science education reforms (Posnanski, 2010; Akerson, Cullen, & Hanson, 2009).

AAAS (1998) strongly suggests that students be frequently given opportunities to actively explore natural phenomena to help them become scientifically literate. This responsibility lies in the hands of efficient teachers properly trained and prepared to carry out the various important roles and functions of a teacher (CHED, 2004). What the teachers should know and be able to do is of primary importance to the education process (Bybee & Champagne, 2000). Thus, science teacher preparation programs should enable prospective teachers to construct science concepts with understanding and reflect on the history and nature of science (NSTA, 2005). However, many teacher preparation programs, such as the Philippine Bachelor of Secondary Education (BSED) - major in Biological Science do not include a course on NOS and no emphasis is given to concepts about the nature of science.

What the teacher is teaching and how she teaches it are likely to be influenced by the nature of the subject and by the teacher's explicit and implicit beliefs about that subject. Science teachers may teach their subject according to how they understand the nature of scientific knowledge (Shah, 2009). Thus, to effectively teach students sophisticated views of the nature of science that are consistent with modern policy and research, teachers must themselves possess well-informed conceptions of the nature of scientific enterprise. If a teacher does not have adequate knowledge about the nature of science, certainly she cannot effectively teach it (Schwartz & Lederman, 2002).

In the Philippines (where this study was conducted), a low level of scientific literacy is evident in the students' poor performance in TIMSS (Trends in International Mathematics and Science Study) in which the Philippines ranked third last for student achievement in science in 1999: 36th out of 38 participating countries (National Centre for Education Statistics (NCES), 2001; Talisayan, Balbin, & De Guzman, 2006) and 4th last in 2003: 42nd out of 45 participating countries (NCES, 2004). Science educators in the Philippines are very interested in determining the predictors of student achievement that are discernible from the TIMSS results so that measures can be undertaken to improve education (Talisayan, Balbin & De Guzman, 2006). Furthermore, a similarly low level of scientific literacy among Filipino students can be perceived at the national level from the National Achievement Test (NAT) results which revealed that for four consecutive school years (2004-2008) and in 2011-2012, student performance in science was the lowest when compared to the other four core subjects included in



the NAT (Department of Education - DepEd, 2009; 2013). This situation suggests the need to upgrade science teaching and learning process and enhance students' scientific literacy.

The University of Mindanao Tagum Campus, the setting for this project, offers a Bachelor of Secondary Education (BSED) degree, with a major in Biological Science. The curriculum in this program does not include a course on NOS and no emphasis is given on the concepts about the nature of science (although the nature of science is included in BSED major in Physical Science). The BSED program accommodates students who aspire to become science teachers in secondary schools, aiming to produce scientifically literate graduates who are capable of carrying out the various important roles and functions of a teacher in accordance with the Philippines' Commission on Higher Education (CHED) Memorandum Order Number 59 (CMO No. 59) (CHED, 1996). This study investigated whether the pre-service science teachers of UM Tagum College have well-informed or naive conceptions of the nature of science and if these conceptions were actually revealed in their practice teaching experiences.

### Research Questions

This study explored pre-service science teachers' conceptions of the nature of science and whether these conceptions were revealed in their practice teaching experience.

Sub-questions:

- What are the pre-service science teachers' conceptions of the nature of science?
- How are the pre-service teachers' conceptions of the NOS revealed in their practice teaching experience?

### Definitions

*Nature of Science.* This phrase commonly refers to the "epistemology of science, science as a way of knowing, or the values and beliefs inherent to the development of scientific knowledge" (Abd-El-Khalick & Lederman, 2000, p. 665).

*Conception of the nature of science.* This refers to the way in which the nature of science is perceived by different individuals.

### Conceptual Framework of the Study

Science enterprise is a multifaceted and dynamic endeavour (Abd-El-Khalick, 2001; Bianchini & Solomon, 2003; Lederman et al 2002; Schwartz & Lederman, 2002) and so as the conceptions of the nature of science (Lederman et al., 2002; Schwartz et al., 2002). This characteristic of science is the likely reason for the continuing disagreements among philosophers, historians, sociologists in science, researchers, and science educators on the single and specific definition of the nature of science (Abd-El-Khalick, 2001; Akarsu, 2007; Akerson et al., 2009; Halai & Hodson, 2004; Kattoula et al., 2000; Lederman, 1999; Lederman et al 2002; Lotter et al., 2009; Schwartz & Lederman, 2002). The topic of study keeps changing. Lederman et al. (2002) doubt the existence of a single and specific meaning for NOS. However, for present purposes the most commonly used definition of the 'nature of science' was identified as the common theme of the varied uses of this phrase. It commonly refers to the "epistemology of science, science as a way of knowing, or the values and beliefs inherent to the development of scientific knowledge" (Abd-El-Khalick & Lederman, 2000, p. 665). The noncontroversial aspects of NOS (Lederman et al. 2002), as recommended by NSTA, describe what tenets of the nature of science teachers must be able to teach to their students (Akerson et al., 2009).

Among the premises of the scientific enterprise important to the understanding of the NOS are that scientific knowledge:

(a) is both reliable and tentative (Abd-El-Khalick, 2001; Akerson et al., 2009; Halai & Hodson, 2004; Kattoula et al., 2000; Lederman et al. 2002; Liang et al. 2008; Lotter et al., 2009; NSTA, 2000; Posnanski, 2010; Sahin, Deniz, & Gorgen, 2006);

(b) is empirically based (Abd-El-Khalick, 2001; Lederman et al. 2002; Lotter et al., 2009; Posnanski, 2010; Sahin, Deniz, & Gorgen, 2006; Schwartz & Lederman, 2002);



(c) is subjective or theory-laden (Abd-El-Khalick, 2001; Akarsu, 2007; Akcay, 2006; Akerson et al., 2000; Lederman, 1999; Lederman et al. 2002; Lederman, Schwartz, Abd-El-Khalick, & Bell, 2001; Liang et al. 2008; Lotter et al., 2009; Posnanski, 2010; Sahin et al., 2006; Schwartz & Lederman, 2002);

(d) necessarily “involves human inference, imagination, and creativity” (Akarsu, 2007, p. 2, see also Abd-El-Khalick, 2001; Akcay, 2006; Akerson et al., 2009; Halai & Hodson, 2004; Lederman, 1999; Lederman et al. 2002; Lederman et al., 2001; Liang et al. 2008; Lotter et al., 2009; NSTA, 2000; Posnanski, 2010; Sahin et al., 2006; Schwartz & Lederman, 2002);

(e) is “socially and culturally embedded” (Akarsu, 2007, p. 2; see also Akcay, 2006; Akerson et al., 2000; Akerson et al., 2009; Lederman, 1999; Lederman et al. 2002; Lederman et al., 2001; Liang et al. 2008; Lotter et al., 2009; Posnanski, 2010; Sahin et al., 2006; Schwartz & Lederman, 2002);

(f) does not arise from application of a universal step-by-step method (no single scientific method) (Akerson et al., 2009, p.1092, see also Halai & Hodson, 2004; Lederman et al. 2002; Liang et al. 2008; NSTA, 2000);

(g) necessarily involves a combination of observations and inferences (Abd-El-Khalick, 2001; Abd-El-Khalick, & Bell, 2001; Akarsu, 2007; Akcay, 2006; Lederman, 1999; Liang et al. 2008); and

(h) involves the formation of theories and laws, terms with distinct functional roles in the development of scientific knowledge (Abd-El-Khalick, 2001; Akarsu, 2007; Akcay, 2006; Akerson et al., 2000; Halai & Hodson, 2004; Kattoula et al., 2000; Lederman et al., 2001; Lederman et al. 2002; Liang et al. 2008; Lotter et al., 2009; NSTA, 2000; Posnanski, 2010; Sahin et al., 2006; Schwartz & Lederman, 2002).

In this paper, ‘well-informed conceptions’ refer to the views that are in agreement with this description of the various aspects of the nature of science while ‘**naïve conceptions**’ means views that do not touch on these eight points, which provide the conceptual framework for this study.

## **METHOD**

### *Research Design*

A qualitative case study design was employed by the researcher in investigating the pre-service science teachers’ conceptions of the nature of science and its relationship to classroom practice. Specifically, the “instrumental case study” (Creswell, 2008, p. 476; Punch, 2005, p. 144) was employed since the focus of the investigation is to gain an insight on a particular issue (NOS understanding and classroom practice) by studying the participants in their natural setting (their school). This was done by collecting multiple forms of data as sources of evidence through an open-ended questionnaire, semi-structured individual interview, non-participant classroom observations, analysis of lesson plans and cooperating teachers’ (CT) feedback. Describing, elucidating, and interpreting the themes generated from the individual and shared patterns of NOS conceptions and instructional practices among the participants analyzed the data gathered. The findings were presented in a written form that stresses description and interpretation (Punch, 2005) in light of the eight aspects of the nature of science.

### *Site and Subjects*

This project was conducted at The University of Mindanao Tagum Campus (particularly at the College of Teachers Education), located at the heart of Tagum City, Davao del Norte Province in Mindanao, Philippines. UM Tagum Campus provided a good site for this study since it offers an education program (BSed major in Biological Science) that aims to produce scientifically literate teachers who will practice their profession at various private and public schools in Mindanao and other parts of the Philippines.

“Purposeful sampling” (Creswell, 2008, p. 214) was employed in selecting the participants and the site for this study. “Purposeful sampling” focuses on selecting ‘information-rich’ cases” for in-depth study to be able to develop a thorough understanding of the issues under investigation. Information-rich cases are those cases from which one can learn a great deal about issues of central importance to the purpose of inquiry” (Patton, 2002, p. 230). The pre-service science teachers of UM Tagum Campus were considered by the researcher as ‘information-rich’ since they were exposed to science subjects for an extended period (approximately 3 years) as they enroll and undergo their science major subjects. Among the strategies under this sampling technique, the



“homogeneous sampling” strategy was used wherein the researcher samples individuals based on their membership in a sub-group (Creswell, 2008, p. 216) with the aim of describing this particular sub-group in depth. In this study, this subgroup referred to all seven pre-service science teachers of UM Tagum Campus who had their practicum on the second semester of the school year 2010-2011.

#### *Data Collection Strategies*

Triangulation is utilized in this study to enhance the validity (Mathison, 1988) and accuracy of the findings drawn from the text data gathered through four data sources. These sources of data include an adapted open-ended questionnaire (the VNOS-C), semi-structured individual interview, non-participant classroom observations, and documents (participants' lesson plans and CT comments and/or suggestions).

#### *Open-ended Questionnaire*

The open-ended Views of the Nature of Science form C (VNOS-C) questionnaire was adapted and used by the researcher for this study. The open-ended nature of the VNOS-C questionnaire allowed the participants to elucidate their views regarding the target NOS aspects using their own words (Krosnick, 1999; Lederman et al., 2002) thus capture diversity in the responses (Jackson & Trochim, 2002). Previous studies of Lederman et al. (2002) showed that the NOS items generated responses that distinguished naïve from well-informed NOS conceptions and provide insights into the participants' understanding about the target NOS aspect. Data generated from VNOS questionnaires elucidated the participants' actual thinking about the NOS and the reasons behind their thinking. These studies also supported the validity of the VNOS-C in assessing NOS understanding in a wide variety of respondents including pre-service secondary science teachers (Lederman, et al., 2002).

This questionnaire was administered after conducting the classroom observations to avoid biasing the classroom observations with the researcher's prior idea about the participants' NOS views and in response to the limited remaining time of the practicum. It took 45-75 minutes for the participants to complete the questionnaire. The researcher reviewed and organized the participants' responses to the questionnaire to determine responses that needed to be elucidated more or ambiguous responses that needed to be clarified and these were incorporated in the subsequent individual interview.

#### *Semi-structured individual interview*

The semi-structured individual interview was intended to validate and clarify the participants' responses to VNOS-C items, to help assess their ascribed meanings to key terms and phrases associated with the nature of science (Lederman et al., 2002), and to gather more data about the participants' views of the NOS. A follow-up interview following the administration of the VNOS-C was considered as a principal source of validity for this questionnaire since it gave an opportunity to directly check and clarify the participants' understanding of each item in the questionnaire as well as the researchers' interpretation of the responses, thus avoid misunderstanding and misinterpretations (Lederman et al., 2002). The interviews, which lasted for about 45-75 minutes per participant, were audio-recorded using a voice tracer.

#### *Classroom observations*

Non-participant classroom observations were undertaken by the researcher to gather first-hand information (Creswell, 2008) about the participants' classroom practice and to determine if their conceptions of the nature of science were revealed in their practice teaching experience. Classroom observations were used to identify links between the participants' understanding of NOS and their classroom practice during their practice teaching.

The researcher used the “ad libitum” sampling in conducting classroom observations wherein “the observer simply recorded whatever was of interest” or significant to the present study (Kellehear, 1993, p. 130). In this study, attention was focused on activities, actions, or attempts that explicitly or implicitly related to the teaching of NOS. The observations also involved an element of “scan sampling” since it used simple recording and noting of the absence or presence (Kellehear, 1993, p. 130) of any attempts toward NOS integration or NOS teaching. Recording of observations was in the form of written notes (Kellehear, 1993). Field notes include both descriptive and reflective entries. “Descriptive field notes” captured the description of events, activities, and people while “reflective field notes” included the researcher's personal thoughts in relation to the observed events, activities, and people (Creswell, 2008, p. 225). Any interaction and/or activities that bear upon or possibly relates (explicitly or implicitly) to the nature of science were written as a single episode.





#### *Lesson plans and cooperating teachers' comments and/or suggestions*

Instructional materials such as the participants' lesson plans and their CT feedback in the form of comments and/or suggestions, for the whole duration of the practice teaching, were photocopied and collected as data sources to supplement, support and/or challenge the data gathered through classroom observations. These instructional materials were triangulated with classroom observations to help the researcher gain more understanding of the participants' classroom practice. Documents are "unobtrusive" and "non-reactive"; they are not affected by the research process (Bowen, 2009). The participants' lesson plans were not made for the purpose of the research and they were already prepared by the participants prior to their actual teaching and before their classes were observed. Thus, these documents were unaffected by the researcher's presence inside the classroom.

#### *Analysis of Data*

##### *Preparation for Analysis*

All the text data were organized by participant (Tesch, 1990) by the researcher. The responses in the VNOS-C questionnaire were typed into a computer file, the audio recorded interviews were transcribed verbatim, the field notes from classroom observations were also transcribed, and the lesson plans and CT comments/suggestions were photocopied by the researcher.

##### *Analysis*

Text data were analyzed individually (each participant was identified by letter) since there is a need to determine each of the 7 participants' conceptions of the NOS and to find evidences of alignment that will show whether their conceptions of NOS were revealed in their practice teaching experience. After the individual data analysis, final comparative analysis was undertaken wherein the data were analyzed collectively by comparing the individual analysis results and finding overall alignment between NOS conceptions and classroom practice among the 7 participants.

##### *VNOS-C responses, interview transcripts, and classroom observation fieldnotes*

In the preliminary exploratory analysis, all the raw text data were read several times, explored and examined individually (per participant) to have a general sense of the data (Creswell, 2008) in its context. Memos, or ideas that came to mind while reading the text data, (Creswell, 2008; Punch, 2005), were written in the margins of the VNOS-C responses and the interview and field note transcripts as comments and/or footnotes. Following the preliminary exploration was the coding of the text data. The analysis was done in an inductive manner since coding starts with specific or detailed codes and then subsuming these codes into broad or general themes in the later stages of the analysis process (Coffey & Atkinson, 1996; Creswell, 2008).

In the second-level coding, the initial/descriptive codes were then examined further and those overlapping or redundant codes were collapsed into pattern codes (Punch, 2005) or categories (Coffey & Atkinson, 1996) or "repeating ideas" (Auerbach & Silverstein, 2003, p. 37) by grouping together related segments or passages of the text data. Subsequently, the categories or repeating ideas were subsumed into broad themes (Auerbach & Silverstein, 2003; Creswell, 2008). Themes were then interconnected, subsuming minor themes into broader themes. A "theme is an implicit topic that organise a group of repeating ideas" (Auerbach & Silverstein, 2003, p. 62), or an aggregate of similar codes that forms a major idea (Creswell, 2008).

Furthermore, the data were "recoded" (Saldaña, 2009, p. 45) as codes, repeating ideas/categories, and themes were refined and re-grouped as the coding progressed. The themes that emerged from data analysis were elucidated in relation to the research questions. The themes were reviewed in light of the eight aspects of the nature of science identified in the NOS literature. The themes were then summarized and elucidated into narratives that answered each of the research questions.

##### *Documents (Lesson plans and CT comments and/or suggestions)*

Documents, in the form of participants' lesson plans and their CT's feedback, were collected and analysed in this study to be able to verify the findings, corroborate or challenge evidence gathered from classroom observations. Document analysis in this study involved an "iterative process" which combines elements of "content analysis" and "thematic analysis" (Bowen, 2009, p. 32). During content analysis, the researcher organised the information



in the documents into categories related to the research purpose which is to determine if the participants' NOS conceptions are revealed in their practice teaching experience. This was done by identifying meaningful and relevant passages or text in the documents which are pertinent to NOS. The subsequent thematic analysis involved recognising patterns within the selected relevant text or data from the documents. This was done by careful, more focussed re-reading, and coding the selected relevant data. The codes were used to build categories and themes pertinent to (the inclusion or exclusion of) NOS (in) teaching. These themes were then elucidated together with the themes taken from field note analysis to identify alignment between the participant's NOS conceptions and his/her classroom practice during practice teaching.

## Results And Discussion

### *A. Discussions on Conceptions of the Nature of Science (NOS)*

In the subsequent sections, the participants' views about the nature of science are presented and discussed in line with the eight identified NOS aspects emphasized in the literature. The individual participants were represented by letters (A-G) to maintain their anonymity.

#### *A1. Scientific knowledge is both reliable and tentative*

Five of the seven participants (A, C, D, F, & G) indicated that scientific theories are not permanent.

*"a theory will become a law if it will be proven with evidences" (C-interview).*

These participant views about scientific theories could be taken to reflect the tentative nature of scientific knowledge (Abd-El-Khalick, 2001). However, with closer examination, these views about the tentativeness of theories arise from the participants' naive conception about the nature of scientific theories and its relationship to scientific laws. The participants asserted that theories do change not because they believed that scientific knowledge is tentative but because they held naive conceptions about the nature of theories as yet to be confirmed laws. Therefore, this finding cannot be considered as a well-informed view about the tentativeness of scientific knowledge.

#### *A2. Scientific knowledge involves the formation of theories and laws, terms with distinct functional roles in the development of scientific knowledge*

Most of the participants did not perceive theories and laws to be equally legitimate as scientific knowledge since most of them think that theories are inferior to law because theories are not proven yet and are still under further investigations (A, C, D, E, & F) while laws are already proven with evidences and are universally accepted (A, B, C, D, E, & F).

*"For me, scientific theory is just a theory of a person without specific evidence. It is not proven yet, it is not a law yet." (C-interview)*

*"Theories are those things that are not proven yet, like the Origin of Mankind, so it's just a theory, scientific theory..." (D-interview)*

Participants failed to recognise that scientific theories are well established, highly substantiated, and internally consistent explanations of scientific concepts. "Laws are descriptive statements of relationships among observable phenomena while theories are inferred explanations for observable phenomena or regularities in those phenomena" (Lederman et al., 2002, p. 500): theories and laws are both legitimate scientific knowledge and one does not become the other. Thus, the above-mentioned views of participants about scientific theories and scientific laws are considered naive.

#### *A3. Scientific knowledge is empirically based*

Four of the seven the participants (A, B, C, and G) believed that science is based on empirical evidence and five of them (A, B, D, F, and G) indicated that

*"science is a set facts and theories based on experiments, investigations and research" (D-interview).*

These facts are proven true with empirical evidences. All of the seven participants asserted that experiments are necessary to test hypotheses, to prove and/or verify existing science concepts, and to solve problems.





Experiments are done following the scientific method to make it organized and logical (A, B, C, F, and G). Moreover, in relation to the perceived essential role of experiments in science, most of the participants (A, B, C, D, F, and G) asserted that

*“experimental approach is the best way of teaching science because it will boost students’ interest as they learn while doing” (D-interview).*

These findings revealed that the participants recognised the empirical nature of science. However, this also means that they perceived scientific knowledge as solely based on experimental data and observations of the natural world, and is facts based, with the exclusion of other subjective human factors such as beliefs and opinions (Abd-El-Khalick, 2001). It should be noted however, that scientists do not have access to all natural phenomena and that experiment results are not absolutely objective since laboratory instruments are always mediated by the set of assumptions underlying their functions (Lederman et al., 2002).

#### *A4. The absence of a universal step-by-step method in doing science*

Majority of the participants (A, B, C, and D) suggested that ‘scientific method’ is the only way, and the best way (C), of doing science.

*“Do you think there are other ways of doing science aside from scientific method?”  
D: “As far as I know, none, only the scientific method.” (D-interview)*

This method is systematic since it has logical steps to be followed (B, C, D, E, F, and G).

*“In scientific method, there are steps to be followed in doing an experiment. So you need to identify your problem, gather information about the problem, formulate your hypothesis [pause] conduct investigation or experimentation, interpret data, and so on....” (E-interview).*

The belief that there is one recipe like procedure to follow in doing science is one of the most widely held naive conceptions about the nature of science (Lederman et al., 2002). “There is no single scientific method that would guarantee the development of infallible knowledge” (Lederman et al., 2002, p. 501).

#### *A5. Science involves a combination of observations and inferences*

“To see is to believe” (F-interview), a person should see something first to be sure of it. This is the idea of the majority of the participants (B, C, D, E, F, and G) when asked about the certainty of the atomic structure.

*“I don’t know how to teach my students that an atom is composed of protons, neutrons and electrons, because even I myself do not purely believe that atoms are composed of these particles because one of my principles in life is “to see is to believe”. I don’t even see atoms; therefore I am hesitant to believe that it is composed of protons, electrons and neutrons.” (F-VNOS-C)*

These participants failed to recognize the distinction between inference and observation: not all concepts in science are directly observable by the human senses, thus scientists use inferences in explaining concepts that are not directly accessible to the senses (e.g. atoms, and gravitational force) (Lederman et al., 2002).

#### *A6. Scientific knowledge is subjective or theory-laden*

*“If I will be presented with a set of data, my perception is definitely different from other person’s perceptions which will result to our different interpretations of the same data.” (A-interview)*

The participants indicate that interpretation is an essential component of science (A, B, and E) (three of the seven). How a person interprets data is affected by how he perceived it (A, B, C, D, and G). The participants asserted that a person’s unique individuality, frame of mind, imagination, observation, ideas, intelligence, prior knowledge, personality, and understanding of the data all affect how a person interprets and deal with empirical data.



*"We arrived at different conclusions from the same data because we have different perceptions about that data, so we interpret it differently" (B-interview).*

It is in this premise of the nature of science that the participants expressed their informed conceptions. These findings reveal that the participants recognized the theory-laden nature of scientific knowledge. Scientists' individuality and mindset greatly influence their work and how they perceived and interpret empirical data (Lederman et al., 2002).

#### *A7. Scientific knowledge necessarily involves human inference*

*"I guess imagination and creativity are applicable to all the stages of investigations. In planning, you need to imagine what is going to happen and you must be creative enough to do such. Same in designing, imagine first what will be the experiment like, and be creative. In data collection, imagination is being applied in the process of thinking of ways and means to gather data and creativity in organizing the collected data, and so on..." (G-VNOS-C)*

Most of the participants (A, B, C, D, F, and G) indicated that scientists use their creativity and imagination in all stages of investigation, from planning, designing, conducting experiment, collecting data, presenting data, interpreting data, presenting of the results, and formulating theories and recommendations. This is similar to the result obtained from the study of Abd-El-Khalick, Bell, & Lederman (1998) in which all participants ascribed to the idea that creativity and imagination is integral components of scientific investigations.

#### *A8. Scientific knowledge is socially and culturally embedded*

It is in the questions related to this aspect of the nature of science that the participants have many ambiguous responses. Most participants would take a stand but were unable to provide an example to illustrate the idea. However, the preceding statement present the general view based on the themes that emerged from the analysis of the participants' responses. Science is affected by the society's social and cultural values in which it is practiced (A, C, D, and G). People's beliefs, activities, and their cultural backgrounds affect how they view science or their attitude toward science. People's philosophical views serve as guide in their discoveries. In addition, investigations involving humans as participants are affected by the participants' cultural values (A). In contrast, two participants articulated that the society's cultural values are also influenced by science and technology (E and G). Science is reflected on people's culture. Thus the relationship between science and culture is two-way, one affects the other and vice versa. On the other hand, it should be noted that two participants (B and F) asserted that science is universal since science concepts are the same wherever you are in the world.

#### *Summary*

It can be deduced from the above findings that generally, majority of the participants held naive views of many of the identified aspects of NOS. They failed to recognize that scientific knowledge is tentative, theories and laws are both legitimate scientific knowledge, there is no recipe like procedures in doing science, and that scientific knowledge is a combination of inferences and observations. This finding is consistent with the other previous studies (Abd-El-Khalick & Akerson, 2004; Akarsu, 2007; Akerson et al., 2000; Cochrane, 2003; Hanuscin et al., 2006; Kucuk, 2008; McDonald, 2008; Ogunniyi et al, 1995; Sahin et al., 2006; Shah, 2009; Thye & Kwen, 2004). Nevertheless, in congruence with earlier studies of Bell et al., (2000), Lederman et al., (2001), and Wang, (2001) some of the participants' in this study expressed informed views on the empirical, subjective and theory-laden, creative and imaginative, and the social and cultural embeddedness nature of scientific enterprise.

#### *B. Nature of Science and Practice Teaching Experience*

Despite unfamiliarity with the concepts of the nature of science, the pre-service science teacher participants suggested that they tried to implicitly include some characteristics of science, to which they referred as the nature of science, and they articulated willingness to incorporate NOS in their future classes. Findings of this study revealed that some of the participants' views about the nature of science, both informed and naive, were implicitly included in their classroom instruction during their practice teaching experience.



### *B1. Implicit NOS inclusion in classroom instruction*

The Classroom observation fieldnotes, lesson plans, and CT comments and/or suggestions indicated that all of the participating pre-service teachers dealt with the empirical nature of science, four of the seven included that science knowledge was theory-laden (B, E, F, and G) and socially and cultural embedded (B, C, E, and F) implicitly included in the planned lessons as well as in the classroom instruction. The empirical nature of science was addressed by the pre-service teachers when they reinforced the lessons discussed in the classroom with laboratory experiments or hands-on activities (e.g. experiment on changes in matter following the discussion of physical and chemical change) to prove the concepts and to let the students experience what they learned.

The theory-laden nature of science is apparent in the practice of almost half of the participants as they asked students' prior knowledge about the lesson and used it as springboard for the discussion. This shows that they acknowledged the students' previous knowledge, individuality, and mindset in presenting the lesson (Lederman et al., 2002). In addition, the pre-service teachers fairly emphasized the social and cultural embeddedness of science as they helped students relate the lesson to the real world or to students' own experiences. For example, application of radiation in medicine (F), Carbon Oxygen cycle and global warming (B). These results agree with other research which showed that the teacher's views about science are consistent with their teaching practices (Lunn, 2002) thus can affect their classroom instruction as well as their choice of teaching strategies (Ackay, 2006).

On the other hand, some naive conceptions were also implicitly integrated in the participants' classroom teaching. These include the treatment of scientific knowledge as fixed instead of tentative by most of the participants (B, C, D, E, F, and G). This is evident in the participants' emphasis on fixed values (e.g. value of the colour bands in resistors) and in the way they treat and present science concepts as if these concepts are very certain and permanent. Furthermore, the logical steps followed during experiments indicated the naive conceptions of the participants about the absence of recipe-like scientific method in doing science (for example, classroom observation field notes for a number of lessons delivered by G indicate that the teacher conducted orientation about the procedures to be followed, before the students perform the laboratory experiment but did so in such a way as suggested that there was only one way the activity could be performed). These participants also presented fixed steps and patterns in solving science problems (e.g. binding energy), and rules or steps to be followed in writing chemical equations. The pre-service teachers did not mention that there are other ways of solving the sample problems and writing the sample chemical equations, that students might have their own ways of doing it, or that the way being presented was a product of historical processes that could have worked out otherwise.

### *Implications*

The implications of this study are significant because they support some indications in the literature that wider teacher conceptions can translate into practice. This suggests that change in the conceptions held by these teachers might lead to change in the experiences they offer to students in their classes.

Considering the absence of any course or emphasis on concepts of the nature of science in their field and the participants' unfamiliarity about NOS, it is fairly anticipated that the participants held naive views about some aspects of the nature of science. Indeed, they expressed uninformed views about many aspects of the NOS. However, discussions during the interviews suggested that with proper exposure, training, and support, the participants had great potential in enhancing their naive views of the other aspects of NOS.

The nature of science was not treated explicitly in the curriculum where the participants of this study were enrolled. The findings of this study provided data to suggest that this needs to change. NOS concepts should be incorporated in the program during the regular syllabi review process.

Finally, the result of this study give the researcher relevant information and data regarding the NOS aspects on which she should focus as she plans and implements interventions and/or seminar-workshops on enhancing science teacher views of the nature of science.



## **Conclusions and Recommendations**

### *Conclusion*

The participants held naïve as well as informed views of some aspects of the nature of science. Most of the participants believed that scientific theories will change and will become laws once proven with empirical evidences, which illustrates that they perceived theories as inferior to law. The participants also indicated that science is purely based on empirical evidences gathered through experimentation following the logical steps of the scientific method which is the only way of doing science. Furthermore, some of the participants perceived science to be objective thus allowing no room for creativity and imagination in dealing with empirical data. These statements are at odds with well-informed views of the nature of scientific knowledge emphasized in the literature.

On the other hand, most participants expressed informed views on the empirical nature of science, the role of interpretation in science, the effect of individuality and mindset in dealing with empirical data, and the creative and imaginative nature of science. Few participants recognized the flexibility of the scientific method as well as the equal legitimacy of theories and laws as scientific knowledge.

The participants articulated unfamiliarity with the NOS, but expressed willingness to incorporate the concepts of the nature of science to their future classes.

Only few of the participants' conceptions of the nature of science were transferred into their practice teaching experience. The participants implicitly addressed only three NOS aspects in their classroom instruction during their practice teaching. One is well-informed: the empirical nature of scientific knowledge; and two are naïve: the existence of a single scientific method or stepwise procedures to be followed in acquiring infallible scientific knowledge, and the absolute nature of scientific knowledge.

### *Recommendations*

- i. The research process piloted in this small study could be scaled up to make a useful contribution to science education as the nation for which it was context moves into a period of rapid curriculum change.
- ii. Pre-service (and in-service) science teachers should be provided with opportunities to enhance their naïve views and reinforce their well-informed conceptions of the identified NOS aspects important to science teaching and scientific literacy.
- iii. The NOS concepts should be incorporated and should be treated explicitly in the new BSSED-Biological Science curriculum.
- iv. Interventions and or seminar/workshops on enhancing science teacher views of the nature of science should be designed and implemented to assist participants in enhancing their NOS views.

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## **The Language of Bias among Teachers in Lorma Colleges Special Science High School**

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### **Abstract**

Education is not about what you learn inside the classroom rather it is about how you apply the knowledge that you gain in your everyday life situation. The way the teacher trains and educates a student is one of the greatest factors of one's knowledge. With the sudden rise of controversies about equality at school, its effects on the students can merely be notified as the matter itself captures interests of people these days. The society focuses mostly on how it affects the students' study behavior - be it by interpersonal and intrapersonal communication; and its impact on the class as a whole. However, researches only concentrate on one party - students' perspective. The research investigated the awareness of teachers regarding the concept of bias. Researchers featured the teachers of Lorma Colleges Special Science High School as the respondents. The research was also intended to find factors and its effects toward the teacher's professionalism and effective instruction. Positive student-teacher relationships are characterized by open communication, as well as emotional and academic support that exist between students and teachers. In shaping successful classroom interaction, learning, and achievement, it is important to determine the degree of similarity between student's and teacher's personalities.

**Keywords:** Bias; Misbehavior; Credibility; Communication; Student-Teacher Relationship

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## Introduction

"The child becomes largely what it is taught; hence we must watch what we teach it, and how we live before it."  
(Jane Addams)

Someone raised his hand, thinking that the teacher would call his name. He was going to get a point at last. But what her lips sent was another name—that of another clever student. He slid down to his chair, perplexed and slightly frustrated. This is one of occurring cases of equality issues happening today. With the sudden rise of controversies about equality at school, its effects on the students can merely be notified as the matter itself captures interests of people these days.

The society focus mostly on how it affects the students' study behavior—be it by interpersonal and intrapersonal communication; and its impact on the class as a whole. But these researches only concentrate on one party - students' perspective. When you put it in a broader sense, this shows inaccurate neutrality. This subject involves teachers as they contribute to the problem. This time, we're going to put it the other way around—teacher's point of view.

"It's about controversial issues and creation, evolution being one of those and the policy is being brought forward for a couple reasons. One is we don't want to be indoctrinating students to any particular point of view. We want to make sure that all sides are being taught in a fair and balanced way and, then, also, we want to encourage critical thinking." (Rigano, 2013)

Education is not about what you learn inside the classroom. Education is about how you apply the knowledge that you gain in your everyday life situation. The way the teacher trains and educates a student is one of the greatest factors of one's knowledge. Therefore, the teachers' balanced way of teaching is the key to one's success and moral.

The aim of this research is to find out if having bias is natural to teachers—for us to expand our understanding and our awareness about the existence of the subject itself. We also intend to find its factors and its effects towards the teacher's professionalism as well as his/her effective instruction.

## Statement Of The Problem

Our research provides people a different perspective about bias. With this, we have three research problems:

1. What are the concepts of the teachers with regard to the term "Bias"?
2. What factors affect most teachers on bias?
3. What are the indicators of teachers in Lorma Colleges Special Science High School on the concept of bias in the class?

## Methodology

The researchers chose a descriptive research methodology and designed a questionnaire survey instrument to assess the perception of the teachers of Lorma Colleges Special Science High School on the different languages of bias.

A descriptive research was used for this study. The descriptive research attempts to describe, explain and interpret conditions of the present i.e. "what is". The purpose of a descriptive research is to examine a phenomenon that is occurring at a specific place(s) and time.

A survey was conducted in the population of teachers in Lorma Colleges Special Science High School. The word "survey" is used most often to describe a method of gathering information from a sample of individuals. (Fritz Scheuren, 2004)



## Results And Discussion

Table 1. Language of Delivery and Credibility

Method	Mean	Rank
Verbally	7.94	4
Visual	9.10	1
Kinesthetic	8.5	2
Auditory	8.44	3

This proves that most teachers in Lorma Colleges Special Science High School are using the English language not just for communication but also as a teaching tool. It impacts the diverse language usage of the whole class that goes to the teachers' adaptation of the language used.

Table 2. Language of Physical Attributes

Question	Yes		No	
	f	%	f	%
Do students with neat uniform will more likely call for attention?	12	75	4	25
Does it distract you when a student wears too much accessories?	14	87.5	2	12.5
Do "chinitos/chinitas" pull your attention?	3	18.75	13	81.25
Do students with physical abnormalities get your attention?	10	62.5	6	47.5
Do you prefer female students more than male students?	5	33.33	10	66.67
Do you like seeing your students more in casual wear than in their uniform?	0	0	16	100
Do you find inappropriate haircuts of boys distracting?	16	100	0	0
Do you see students wearing make up differently?	8	50	8	50

75% of the respondents have shown to like students more in the first question with neat uniform. It's only natural for human instincts to choose a much cleaner, "healthy" option. Students are supposed to follow the school's rules and regulations that make the teachers used to seeing them in their proper attire and physique.

Table 3. Language of Ethnicity

Question	Frequently		Occasioanally		Seldom		Never	
	f	%	f	%	f	%	f	%
Does the ethniciry of your students interest you?	5	31.25	5	31.25	4	25	2	12.5
Do you have problems conveying information to foreign students?	3	18.75	4	25	8	50	1	6.25
Do you give foreign students special attention?	3	18.75	7	43.75	4	25	2	12.5
Do often find yourself relating to students who came from the same ethnic group like you?	6	37.5	3	18.75	2	12.5	5	31.25
Do you still need help from a student to translate hour native tounge to another language for a student?	0	0	2	12.5	5	31.25	9	56.35
Do often stay a few minutes longer in class for a foreign student to check if he/she understand the lesson?	3	18.75	6	37.5	4	25	3	18.75
Do you tell jokes about students who are from a different race?	1	6.25	1	6.25	4	25	10	62.5
Do you like putting the foreign students in front where you can easily check on them?	2	12.5	4	25	5	31.25	5	31.25

The second has 50% of the respondents answering "Seldom" for English is widely known and use. Taken from Ayasa, English is the most widespread language in the world and is more widely spoken and written than any other language. Over 400 million people use the English vocabulary as a mother tongue, only surpassed in numbers by speakers of the many varieties of Chinese. The teachers will use the said language to build a ground of understanding for the student.

Table 4. Language of Attitude and Behavior

Questions	Always		Often		Sometimes		Never	
	f	%	f	%	f	%	f	%
Does the class mood affect the way you teach?	9	56.25	4	25	3	18.75	0	0
How often do you call students who don't raise their hands?	5	31.25	8	50	3	18.75	0	0
How often do you call students who raise hands?	6	37.5	8	50	2	12.5	0	0
How often do you consider a student who mentally has special needs?	7	43.75	7	43.75	2	12.5	0	0
Does each of your class meet your standards?	1	6.25	10	62.5	5	31.25	0	0
Does your standard differ for different classes?	11	68.75	4	25	1	6.25	0	0
When asking questions, do you think a student who blurs the answer loudly must be entertained?	2	12.5	4	25	8	50	2	12.5
Do you give considerations to a student who feels emotionally unsafe at school?	7	43.75	7	43.75	2	12.5	0	0

The table presents that high percentage of teachers has different standards for different classes. According to Vivian Yee of New York Times, it was once common for elementary-school teachers to arrange their classrooms by ability, placing the highest-achieving students in one cluster, the lowest in another. But now, ability grouping has re-emerged in classrooms all over the country. Adapting this kind of method, the teachers depend on what class they are teaching; especially between the “star” section where brilliant students were placed in and a clump of poor learners.

Table 5. Language of Multiple Intelligence

Multiple Intelligence	Frequency	Percentage	Rank
Interpersonal	4	25	2
Linguistic	1	6.25	3.5
Intrapersonal	10	62.5	1
Logical	1	6.25	3.5
Spatial	0	0	-
Bodily Kinesthetic	0	0	-
Musical	0	0	-

This table demonstrates that most teachers perceive Intrapersonal Children are the most preferred students to teach in the classroom. Intrapersonal Intelligence is also known as Self Intelligence and Emotional Intelligence. (McGrath & Noble 1995) These are the students who have a high-level awareness and mostly independent on his or her learning.

Table 6. Language of Family Relationship

Question	Strongly Agree		Agree		Disagree		Strongly Disagree	
	f	%	f	%	f	%	f	%
I should set standards for a students who came from a great family.	1	6.25	2	12.5	7	43.75	5	31.25
I should give make up quizzes separately to my friend student.	1	6.25	0	0	5	31.25	10	62.5
I think a family and relative student who attends one of my classes should be given extra credit.	0	0	0	0	5	31.25	11	68.75
I should satisfy the standards of students with notable names.	0	0	3	18.75	6	37.50	7	43.75
I can control students who have not been close to me or my family.	2	12.5	6	37.50	3	18.75	4	25
Students who are not in my family should not be entertained.	0	0	1	6.25	4	25	11	68.75
I have to treat the students who came from our family friend better.	0	0	1	6.25	5	31.25	10	62.5
I have to mention students who I have been friends with.	0	0	0	0	4	25	12	75

This table presents that more than 60% percent of the teachers' population of Lorma Colleges Special Science High School “STRONGLY DISAGREE” on the concept of bias through the language of Family Relationship. Teachers displayed that giving their family related students a special treatment is not acceptable in the school.



## Conclusions And Recommendations

Bias cannot be identified to be natural or not due to some circumstances that the teacher adjusts to the students, therefore leaving an impression as they are bias. Alternatively, they have identified six different fields that contribute on being bias. These fields were based on the teachers' different behaviors in a class, which led to our conclusion that bias may or may not be natural but in different areas, its existence lasts.

In considering the effectiveness of the study, this research implied a deeper and further explanation on languages of bias among teachers and reflection of each individual on the overrepresentation of teachers to students. Thus, the study will give better understanding to the society and will make them cautious of the situation about bias among teachers.

Further things should be done, like the awareness, should be increased in order to become a role model to students, not promoting bias on any subject field of the teacher. Everyone should be cautious in this kind of situation, whether to understand the teacher or not.

Another thing to be implemented is the inclusive education in schools. It refers to the method of teaching where teachers should not propose the ability grouping among the students, but instead, they should instruct students equally through individualized instructions that will satisfy their needs.

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